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ABSTRACT

Follow-up surveys were conducted of adult clients who participated under Titles IIA and III of the Job Training Partnership (JTP) Act in Ohio. Data were gathered from JTP clients 13 and 26 weeks after completion of the program and combined with data from the state management information system, and a survey of a sample of employers of JTP-Ohio services. The survey found that a little more than two-thirds of both Title IIA and Title III participants enter employment. These former clients are far more likely to be employed and to have higher weekly earnings when they are contacted after termination than clients who leave JTP-Ohio for other reasons. During the first 13 weeks after leaving JTP-Ohio, former Title IIA clients work an average of 8 weeks and Title III clients work almost 10 weeks. After 13 weeks, 59 percent of the Title IIA clients and 73 percent of the Title III clients, are employed. The Title IIA clients who are employed earn an average of $218 and the Title III clients earn $363. About the same results were found after 26 weeks. However, persons who were welfare recipients when they began the programs were working less and earning less than those not on welfare when they enrolled. About half of those on welfare at the start of the program are not on it after 13 or 26 weeks. Employers were generally favorable to the program. The study concluded that the JTP-Ohio program has been successful in helping more people with more problems than on-the-job training alone could have been, but that some individuals have more problems than the program can address. (KC)

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Statewide Follow-up Surveys for Job Training Partnership-Ohio Program Year 1987

Morgan V. Lewis

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FOREWORD

The Job Training Partnership Act provides funds to the states to assist individuals, especially those with serious barriers to employment, to enter the labor market. In Ohio the Bureau of Employment Services administers these funds and operates Job Training Partnership-Ohio. This report was prepared to assist the Bureau of Employment Services to carry out the evaluation functions required by JTPA.

The report presents the results of surveys of former JTP-Ohio clients, and their employers. These survey were conducted for our Center by Appropriate Solutions, Inc. I wish to express our thanks to Dr. Dennis Benson for the fine cooperation we received from his firm in this effort.

The analysis of the data collected by Appropriate Solutions was directed by Dr. Morgan Lewis who also was responsible for the preparation of this report. Dr. Lewis assumed direction of this project when its previous director, Dr. Lawrence Hotchkiss, left our Center to take another position. Dr. Lewis has asked me to express his appreciation and indebtedness to Dr. Hotchkiss. The procedures that were used to complete the project had all been developed by Dr. Hotchkiss, and he also assisted in the preparation of this report by conducting the multivariate analyses it contains. Dr. Hotchkiss's ongoing advice and assistance were crucial to the completion of this report.

Other major contributions were made by Ms. Lisa Thiel and Monyeene Elliott. Ms. Thiel was responsible for management of the data and preparation of the analysis programs. The analyses involved the combination of several large and complex data sets and Ms. Thiel managed them in an admirable fashion. Ms. Elliott handled the secretarial responsibilities of the project, including the preparation of the final draft of this report, while teaching its author to compose on a word processor. For this contribution, Dr. Lewis will always be appreciative.

Finally, I am pleased to acknowledge the support and patience of Ms. Alice Worrell, Manager of Evaluation Services, Ohio Bureau of Employment Services. In the course of this project, Ms. Worrell had to oversee the development of a number of new procedures for sharing data between OBES, our Center, and Appropriate Solutions. In dealing with the inevitable problems that arose, she was unfailingly understanding and supportive for which all of those who worked with her are very grateful.

Ray D. Ryan
Executive Director
Center on Education and
Training for Employment

EXECUTIVE SUMMARY

This report presents an evaluation of Job Training Partnership (JTP) Ohio services to adult clients who participated under titles IIA and III of the Job Training Partnership Act. Data from follow-up surveys of JTP clients conducted 13 and 26 weeks after completion of JTP-Ohio training were combined with data from the state Management Information Systems (MIS) system. A survey of a sample of employers of JTP clients was also conducted. Multivariate methods were applied to evaluate JTP-Ohio services.

These analyses were designed to determine if clients benefitted from the services they received from JTP-Ohio in terms of employment, earnings, and decreases in welfare dependency. Gender, age, and race have strong influences on employment after leaving JTP-Ohio, as do welfare status, previous work experience, and educational attainment. All of these influences are in the expected direction.

Just as important as all these individual characteristics, however, is whether or not the clients enter employment at termination. A little over two-thirds of both title IIA and title III clients enter employment and these former clients are far more likely to be employed and to have higher weekly earnings when they are contacted after termination than clients who leave JTP-Ohio for other reasons.

During the first 13 weeks after leaving JTP-Ohio, former title IIA clients work an average of 8 weeks and title III clients work almost 10 weeks. When they are contacted during the thirteenth week, 59 percent of the IIA clients and 73 percent of the title III clients are employed. The IIA clients who are employed earn an average of $218 and the title III clients earn $363. These differences reflect the difference in the characteristics of clients: title III clients are more likely to be white males and to have higher educational attainment and more work experience than title IIA clients.

When former IIA clients are contacted again another 13 weeks later, 26 weeks after leaving JTP-Ohio, they have virtually the same average number of weeks worked and percentage employed during the second follow-up period, and their average weekly earnings have increased by $7.

It is far more difficult to prepare individuals who are welfare recipients at application for employment. When they are contacted 13 and 26 weeks after termination, those who were on welfare at application work less, earn less, and are more likely to be receiving welfare than those who were not on welfare when they enrolled. Nevertheless, participation in JTP-Ohio substantially reduces the percentage receiving welfare. At application, approximately one-half of all enrollees are recipients. At the 13-week follow-up, this figure drops to almost one-quarter and

drops even a little lower at the 26-week follow-up. A little less than 10 percent of clients who were not welfare recipients at applications are receiving assistance when they are contacted at follow-up.

In general, employers are satisfied with the JTP-Ohio clients whom they hire. Employers were asked to make 15 ratings comparing their typical employees who have been through a JTPA/PIC program with those who have not had such a program. On eight of these scales, the average ratings are in favor of JTP-Ohio clients, and on five there are no significant differences. The exceptions are on the amount of OJT and supervision needed. On these scales the differences are in favor of employees who have not been through a JTPA/PIC program. On the average, clients stay with their first employers after leaving JTP-Ohio for almost a year (11.4 months). Over 80 percent of employers report they are likely to hire more JTPA/PIC participants in the future. Their most important reasons for doing so are the wage subsidy and lower training and recruitment costs, in that order.

Implications

Many personal characteristics over which JTP-Ohio has no control have a strong influence on what happens to clients after they leave their programs. One factor over which JTP-Ohio has some control, however, has a powerful impact independent of personal characteristics. That factor is whether or not the client is employed at termination. Clients who are employed at termination (in comparison to those who are not) are more likely to be employed and are less likely to be on welfare when they are contacted 13 and 26 weeks later. These are substantial differences of two to three magnitudes in favor of those who are employed at termination, even when the effects of differences in personal characteristics are statistically controlled.

Simply having a job at termination, however, is not as powerful as these comparisons suggest. What having a job indicates is the presence of a number of other personal traits that are important to success in the labor market. Those clients who had jobs at termination also had--with the support and encouragement of staff--sufficient motivation, personal discipline, and resources to persist in their JTP-Ohio programs. They wanted jobs enough to find the JTP-Ohio agencies in their SDAs, to enroll with these agencies, to accept the program assignments they were given, to fulfill the responsibilities of their programs, and to accept the jobs that the programs made available. They had, in other words, successfully passed a number of screens or hurdles that indicate they have the skills and personal characteristics that are desired by employers.

Unfortunately, the services that JTP-Ohio can provide are not enough to enable everyone who enrolls to develop or demonstrate preferred skills and characteristics. About 3 of every 10 who enroll do not have jobs when they leave even though the clients who are least job ready do receive the most services. Welfare recipients, exoffenders, and those with handicaps, low educational attainment and limited work experience are the ones most likely to be assigned to classroom training which is the most intensive service available from JTP-Ohio.

In some cases, though, the opportunities that can be provided are not enough. When the employment and earnings of former clients who took classroom training are compared to those who received OJT, it appears that OJT produces much better results. When the differences in the characteristics of clients assigned to these programs are controlled statistically, much of the apparent superiority of OJT disappears. It is not that OJT is a far more effective program; rather, it is that classroom training is assigned those more difficult to serve. When the differences in clients served by the two programs are considered, the results of these programs are much more similar than when the differences in clients are not considered.

To a considerable degree, the results presented in this report confirm the basic assumption that has been the core of employment and training programs since their inception. Program staff know that there are many people who need a little more assistance and encouragement than they have received in their previous encounters with the educational and employment institutions of our society. This is what JTPA provides. JTP-Ohio cannot overcome all the problems that all its clients bring to it, but it can and does help many and the effects of this assistance persist at least for half a year after the clients leave their programs.

CHAPTER 1

INTRODUCTION

The Ohio Bureau of Employment Services (OBES) administers many training programs under the auspices of the Job Training Partnership Act (JTPA). This report is part of a second round of reports designed to provide OBES with detailed data that can be used to help evaluate these training programs. The first sequence was completed in early 1988 and reported on clients who had completed their programs during the first three quarters of Program Year (PY) 1986. This second round is based on clients who left their programs during the last quarter of PY 1986 and the first three quarters of PY 1987. This second round thus covers the time period from April 1, 1987 through March 31, 1988.

The present report contains the results for four separate groups of respondents:

Chapter 3, title IIA clients 13 weeks after termination.

Chapter 4, title IIA clients 26 weeks after termination.

Chapter 5, title III clients 13 weeks after termination.

Chapter 6, employers of PY 1987 terminations.

To facilitate comparisons between the first and second round of reports, the formats used for the tables in the first reports are also used for this second round.

Data for this report are taken from three sources. The primary data source is a follow-up survey of individuals who received training or other services from JTP-Ohio programs conducted under title IIA and III of JTPA. These individuals were contacted 13 or 26 weeks after leaving the program. The second source is OBES's Management Information Systems (MIS). The MIS files were merged with the data from the follow-up surveys to produce the data summaries contained in this report. The third source was a survey of a sample of employers of former title IIA clients.

This report is divided into seven chapters. In addition to the four listed above, chapter 2 explains the methodology of the study, and chapter 7 summarizes and interprets the major findings.

CHAPTER 2

METHODS

Sampling

In determining the title IIA sample for the state of Ohio, we followed in detail the procedures outlined in the Technical Assistance Guide (TAG) provided by the Department of Labor (U.S. Department of Labor 1986). As prescribed by TAG, title IIA sample sizes were calculated for each SDA in a manner necessary to assure a preset level of precision with a 95 percent confidence level. In drawing these samples, if an SDA had fewer than 200 terminees, then all terminees in that SDA were included in the sample. If, on the other hand, an SDA had more than 200 terminees, then the procedures outlined in exhibit 3.11 of TAG were used to select the sample size.

Once the proper sample size was determined, it was then multiplied by a factor of 1.1 in order to obtain an oversample. There are two reasons for oversampling. First, by oversampling, we avoided sampling bias problems that can be caused by changing sampling proportions due to an SDA wrongly estimating the number of terminees. Second, the oversample was used to provide a backup pool of cases from which to draw replacements in the event those in the primary sample must be dropped due to disability or death.

All statewide statistical summaries for former title IIA clients were calculated using sample weights. Sample weights were used to correct for unequal sampling probabilities for different SDAs, welfare status, and for the difference in response rates between those employed and those not employed at termination. The weights are defined as the proportion of individuals in the population for each combination of SDA, welfare status, and employment status divided by the total proportion of completions in the sample. The sample weights yield precisely the same results within each SDA for the total sample and welfare recipients as did the adjustment for nonresponse bias displayed in TAG.

Data Collection

The first step in the data collection process was to attempt to complete each interview by telephone. The telephone interview followed in detail the DOL requirements as described in TAG. After 2 weeks, if the interviewer was unable to interview the terminee successfully by phone, then a mail version of the questionnaire was sent. Five days after the mail survey was sent, a combination thank-you and reminder letter was mailed to the terminee. If, after an additional 5 days, the survey was not returned, then a second mail survey was sent. If the second mail survey was not returned and the terminee was still not successfully interviewed by telephone, then his or her file was classified as incomplete.

Included in the mailouts and in all the telephone messages left for the terminee was the 800 telephone number for the ASI survey center. This number was left with instructions encouraging the terminee to call in to complete the interview. The "call-in" method of data acquisition proved highly successful and accounted for more completed interviews than either the initial phone calls or the mail survey.

Statistical Analyses

Results of the statistical analyses are reported in bivariate and multivariate tables. Eleven dependent variables are included in the analyses. The first five are objective indices of the former clients experiences after leaving JTP-Ohio programs: (1) weeks worked during the 13-week follow-up period, (2) whether employed during week 13 of the follow-up period, (3) earnings during week 13 for those who worked, (4) whether receiving public assistance (welfare) during week 13, and (5) whether attended school during the 13-week follow-up period.

The other six dependent variables were not included in the first round of reports. These include four attitudinal ratings by clients of the training or services they received while a participant. These ratings were obtained as part of the 13-week follow-up interview:

(6) Rating of program length: too short, too long, about right; scored 1 to 3.

(7) Rating of instructors or other people who provided services: poor, fair, good, excellent; scored 1 to 4.

(8) Overall rating of program or services: poor, fair, good, excellent; scored 1 to 4.

(9) Ratings of degree to which training or services helped in first job held after program: not at all, a little, some, a great deal; scored 1 to 4.

(10) Clients' report of whether JTPA assisted them to find their first job: yes or no.

(11) Clients' report of whether employer required them to sign up for JTPA to get their first job: yes or no.

Table entries are averages (or means) for weeks worked, earnings, and attitudinal ratings; entries are percentages for the remaining variables.

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Regression analysis was applied to help isolate the net contributions of several variables to the eleven outcomes. Results of the regressions generally are presented in tabular format paralleling presentation of the bivariate relationships. In these tables, entries are adjusted means or percentages on the dependent variables rather than observed values. Differences among the adjusted entries indicate the net impact of a given variable (e.g., race, gender, classroom training) while controlling for the remaining independent variables.

The adjusted entries are calculated to satisfy two criteria: (1) Differences between adjusted means or percentages are consistent with effect estimates in the regression analyses, and (2) the (weighted) average of the cell entries equals the overall average in the sample. (See, e.g., Cohen and Cohen 1983).

The primary advantages of adjusted means or percentages over reporting regression coefficients is that the adjusted values provide more information and permit ready comparison to the bivariate tables. The primary disadvantages are that the adjusted values are not as parsimonious and are more cumbersome to calculate than the regression coefficients.

Variables

This section contains the definitions of all the variables used in the report except the six new dependent variables that are defined above. The follow-up data are taken from the survey described above. The other variables were defined from the Ohio Bureau of Employment Services MIS system. The source of data used to define each variable is indicated with the definition.

- Age--The data are divided into 3 age groups these being (source--MIS):

  --Ages 29 and younger
  --Ages 30-54
  --Ages 55+

- Gender--(Source--MIS):

  --Male (coded as 1.0 for regression analyses)
  --Female

- Race--The data are divided into 3 racial categories these being (source--MIS):

  --White
  --Black
  --Other--This group includes Hispanics, Asians, and Others.

- Education status at follow-up--This variable indicates whether or not an individual is enrolled in school at follow-up (source--survey, q. 17):

  --yes
  --no

- Types of services--This variable specifies the types of services the JTP client received. We have chosen to use the three most common types of services (source--MIS transaction records):

  --On the job training/No on the job training
  --Job search/No job search
  --Classroom teaching/No classroom teaching

- Reason for ending training--This variable specifies why a JTP client left a JTP training program. These variables contain five categories; these are (source--MIS):

  --Entered employment A01-A05
  --Exceeded program duration C12
  --Exceeded 90 day hold status C14
  --Poor attendance C06,C07
  --Other

- Education Status at Follow-up--This variable specifies the highest level of education the JTP client attained (source--survey, q. 16)

  --High school dropout--Grades < 12
  --High school graduate--Grade 12
  --Some college--Grade 13,14,15
  --16+--College graduate

- Barriers to employment--Three variables are used here to describe the most common barriers to employment a JTP client might possess (source--MIS):

  --Offender (yes/no)
  --Handicapped (yes/no)
  --Limited English (yes/no)

- Family status--This variable specifies the position of the individual within his/her household (source--MIS):

  --Single parent with ≥ one child under 6 years old
  --Single parent with ≥ one child 6-17 years old
  --Parent in two parent home

--Other family member
--Unrelated individual
--Other

- o Public assistance at application--This variable specifies whether or not a respondent received public assistance at the time of application to participate in JTP programs (source--MIS):

  --yes
  --no

- o Welfare status at application--If a JTP client receives welfare this variable specifies the different types of welfare the client may receive (source--MIS):

  --AFDC
  --General
  --Not receiving public assistance

- o Received layoff notice at application (source--MIS):

  --Yes
  --No

- o Labor-force status at application (source--MIS):

  --Employed
  --Unemployed (not working but looking for work)
  --Not in labor force (not working, not looking)

- o Employment at week 13 and week 26 (source--survey):

  --Yes
  --No

- o Earnings in week 13 and week 26 in dollars (set to missing if not employed; source--survey):

- o Weeks worked during the 1 to 13-week and 14 to 26-week follow-up periods (source--survey):

- o Welfare status at week 13 and week 26 (source--survey):

  --Yes--received AFDC, general or refugee assistance
  --No--received no public assistance

- o Weeks worked in year prior to application (source--survey)

- o Labor-market experience (source--survey)
  Defined as number of years since last enrolled in full-time school during which respondent worked at least 6 months.

CHAPTER 3

TITLE IIA 13-WEEK FOLLOW-UP

This chapter examines the labor market experiences of JTP-Ohio participants during the three months immediately after they left their programs. The findings are organized into four sections. Section one presents basic descriptive data for all variables used in the analyses. The remaining sections focus on eleven outcome variables. The outcomes are (1) weeks worked during the 13-week follow-up period, (2) employment status during week 13, (3) earnings in week 13 for those employed that week, (4) welfare status during week 13, (5) school attendance status during the 13-week follow-up period, (6-9) clients' attitudinal ratings, (10) JTPA assistance in finding first job, and (11) employer required JTPA sign-up. The intended impact of JTP programs on most of these outcomes is clear; JTP is supposed to increase weeks worked, increase the chance of employment, increase pay, and reduce the likelihood of receiving public assistance. Clients should be satisfied with the services they received and report they received assistance in finding their jobs. The intended impact of JTP services on schooling is not so clear. Under certain circumstances, it would be desirable to stimulate school attendance; in other cases, work might be viewed as an alternative to school. Schooling is included as an outcome because it is a major activity that tends to compete with work.

Sections two to four of the chapter focus on independent variables that may influence the five outcomes. Section two analyzes demographics--age, race, and gender effects. Section three examines effects of JTP-Ohio services and reason for termination from JTP. Section four analyzes effects of several additional variables, including education and welfare status. A summary of the major findings and a discussion of their implications are presented in chapter 7.

The discussion of the tables emphasizes those findings that appear most significant from a policy perspective. Any major differences between the PY 1986 and PY 1987 findings, are noted. The reader should keep in mind that when we refer to PY 1986, we really mean the first three quarters; and when we refer to PY 1987, we really mean the last quarter of PY 1986 and the first three quarters of PY 1987.

Descriptive Data

The means and standard deviations of each variable used in this chapter are shown in table 3-1. Most of the results are similar to PY 1986. Approximately 60 percent of the respondents (adjusted for nonresponse rate and SDA sampling stratification) were employed at follow-up. The average weeks worked out of 13 was 7.9. The increase in weeks worked, although small (.29 of a

TABLE 3-1

TITLE IIA MEANS AND STANDARD DEVIATIONS FOR ALL VARIABLES USED IN THE ANALYSES
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variable	Variable Code Name	Mean	Standard Deviation	Number in Category
Employed at Termination	EMPLTERM	67.94	45.79	6902
Employed at Follow-up	EMPLFLUP	59.49	48.53	6902
Average Pay in Week 13	PAYWK13	217.53	132.77	4282
Average Number of Weeks Worked during follow-up	WEEKSWRK	7.93	5.56	6902
Welfare Status at Follow-up	WELSTA2	31.61	45.07	6746
Education Status at Follow-up	ATNDSCHL	3.54	17.79	6820
Client Average Ratings				
Program length	LENGTRNG	2.48	.85	5830
Staff	RATEINST	3.26	.79	6179
Program overall	RATEPROG	3.14	.81	6045
Help on job	TRNHELP	2.52	1.31	4924
JTPA Assisted to Find Job	JTPAASST	36.54	47.85	5055
Employer Required JTPA Signup	EMPLREQ	17.63	38.73	4954
Labor Market Experience	LMEXPER	10.63	15.72	6552
Number of Weeks Worked in Year Prior to Application	WKSWRK1	16.82	21.35	6556
Percent Male	SEX	50.32	49.97	6902
Limited English Proficiency	LEP	.96	8.97	6902
Black	BLACK	30.55	41.71	6902
Other Race	OTHRRACE	3.31	17.72	6902
AFDC Recipient at Application	AFDCAPL	35.79	47.90	6902
General Recipient at Application	GENRLAPL	17.85	36.64	6902
Exceeded Program Duration	TOOLONG	4.05	17.57	6902
Exceeded 90 Day Hold Status	EXHOLD	7.41	24.38	6902
Low Attendance	LOATTEND	6.62	25.14	6902
Ages 30 to 54	AGE3054	53.61	49.88	6902
Ages 55+	AGE55PL	3.30	17.22	6902
Handicapped	HANDICAP	6.84	25.43	2015
Dropout	DROPOUT	23.24	42.24	6902
Some College	SMCOL	19.68	44.90	6902
College Graduate	COLGRAD	7.36	26.53	6902
Offender	OFFENDER	8.90	24.92	2016
Not in Labor Force	NOTINLF	11.54	49.41	2016
Unemployed at Application	UNEMPL	75.87	42.26	2016
Job Search	JBSRCH	27.49	43.24	2016
Classroom Training	OCC-CLAS	25.90	44.47	2016
On the Job Training	OJT	26.19	46.75	2016
Single Parent with $\geq$ 1 child Ages 1 to 6	SP1-6	12.01	31.43	2016
Two Parent Home	TWOPAR	26.42	46.34	2016
Other Family Member	OTHFAMM	6.79	25.84	2016
Single Parent with $\geq$ 1 children Ages 7 to 17	SP-617	16.92	37.23	2016

week) is a statistically significant increase over the prior year. The percentage employed at termination, however, was a full 10 percentage points higher than in PY 86. JTP services resulted in placing more participants in jobs during PY 87, but the participants did not have comparable increases in their ability to retain the jobs they received.

In PY 1987 the average weekly earnings for those working in week 13 of the follow-up period was $218; an $11 increase over the PY 1986 results that is highly statistically significant. At the time of application to JTP-Ohio 53 percent were welfare recipients; at follow-up this figure had dropped to 32 percent. Both of these figures are slightly higher than the previous year.

The major differences between the PY 86 and PY 87 samples lie in (1) their educational attainment, (2) the percentage who reported they attended school during the follow-up period, and (3) their activities while enrolled in JTP-Ohio. The PY 87 sample had higher percentages of clients who graduated from college. Those who reported being enrolled in school during the follow-up, however, was much lower than in the prior sample. At least part of this decline was because a specific question on participation in education or training programs during the follow-up period was not asked the PY 87 sample. The percentage of clients who received job search assistance and classroom occupational training were both lower in PY 87 than in PY 86. The percentage receiving on-the-job training was the same.[1]

Table 3-1 presents the results for six variables that were not included in the PY 1986 reports: the four satisfaction ratings clients provided of their experiences in JTP-Ohio, the percentage who felt JTPA assisted them to find their jobs, and the percentage who reported their employer required them to sign up with JTPA to get a job. All of the clients' ratings are well above the neutral or midpoint of the scales. The probabilities of obtaining scores this far above neutral by chance are less than .001. The clients were most satisfied with their experiences in their programs (note that the rating of program length was on a 3-point scale) and least satisfied with the degree of help their training or services provided in their jobs. Only a little more than one-third reported JTPA assisted them to find their jobs, and about one-sixth said their employers required them to sign up for JTPA to be hired.

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[1] The number for whom information on types of services received and some other special characteristics of participants is less than one-third of the total usable sample. This is because the complete OBES file on each participant began to be provided in February 1988. Prior to then, only selected characteristics had been provided.

Generalization of the findings reported here to the entire eligible population would, of course, be risky. So long as the profile of JTP clients remains stable, however, generalization to JTP clients is not threatened.

Age, Race, and Gender

This section analyzes differences on the 11 outcomes by age, race, and gender. The presentation proceeds in stages from simple to complex. First, bivariate differences on the outcomes are shown by age, race, and gender. Second, a multiway crossbreak showing simultaneous differences on the outcomes by age, race, and gender is examined. Next, a multivariate analysis including simultaneous controls for several variables that are likely to influence the outcomes is presented. Finally, the age-race-gender tables are presented separately by welfare status at the time of application.

Table 3-2 shows the bivariate associations between each of the dependent variables and age, race and gender. Although all the variables display some differences in average value or percentage across the 3 age categories, the differences are statistically significant only for those marked with asterisks; the more asterisks, the less likely a difference would be found by chance.[2] Age shows a strong association with earnings, welfare status, and JTPA assistance in finding a job. The association between age and earnings is curvilinear. From the youngest age category to middle category earnings increase; they decline again when comparing the middle category to the oldest category (55 and older). Of course, the relatively small number of respondents in the oldest age group could account for the apparent nonlinearity, but the curvilinear relationship between age and earnings has been observed frequently in past research.

Older workers and members of minority groups, those most likely to need assistance in obtaining jobs, were significantly more likely to report they were assisted by JTP-Ohio. These and similar findings discussed at other points in this chapter suggest that JTP-Ohio staff are attempting to identify clients most in need of help and to direct more services to these clients.

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[2] In all tables in this chapter, and in the report, the following signs are used to indicate level of statistical significance: $*p \leq .05$; $**p \leq .01$; $***p \leq .001$; $****p \leq .0001$. Sample sizes in the tables are number drawn for the sample, not the number of completed interviews. To find the number of completed interviews, multiply the sample size by the response rate converted to a proportion. For example in table 3-2, the response rate for respondents 22-29 years of age was 77.31%. The sample size is .7731 times 3879 or 2999.

TABLE 3-2

TITLE IIA MEANS/PERCENTAGES BY RACE, BY GENDER, AND BY AGE (BIVARIATE)
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks during Follow-Up	8.03	7.87	* 7.68	8.57	6.52	**** 8.23	8.46	**** 7.40
Employment Rate at Follow-Up	59.58	59.72	54.48	64.68	47.80	**** 63.51	63.86	**** 55.05
Average Weekly Earnings at Follow-Up	208.83	226.41	**** 183.81	227.88	188.35	**** 209.64	249.92	**** 179.49
Education Status at Follow-up. Percentage of Individuals Receiving Education	3.76	3.45	2.14	3.45	3.37	6.93	3.41	3.68
Welfare Status at Follow-up. Percentage of Individuals on Welfare	33.51	31.37	**** 10.97	24.34	47.05	**** 36.28	24.66	**** 38.65
Clients' Average Ratings								
Program length	2.50	2.46	2.43	2.54	2.35	**** 2.42	2.46	2.50
Staff	3.26	3.27	3.31	3.29	3.21	** 3.25	3.25	3.28
Program overall	3.16	3.13	3.15	3.16	3.12	3.19	3.12	** 3.18
Help on job	2.50	2.54	2.64	2.51	2.55	2.60	2.48	** 2.58
Percentage JTPA Assisted to Find Job	35.72	36.66	*** 44.65	33.32	43.01	**** 49.70	37.53	** 35.31
Percentage of Employers Required JTPA Sign up	17.77	17.51	14.53	17.77	15.63	**** 28.02	20.69	**** 13.93
Response Rate	77.31	80.72	90.17	82.31	71.34	81.15	78.81	80.33
Sample Size	3879	4574	234	6248	2170	260	4530	4148

The relationships between race and the first five outcomes corresponds to past findings. Blacks in this sample work less and earn less than members of other races. They also are more likely to receive public assistance than members of the other two racial categories. In the current survey, unlike the previous one, members of other racial/ethnic groups were also more like to receive welfare than whites. The gender differences are in line with past findings: females work less and earn less than males, and they are also more likely to be on welfare than males.

There are a few statistically significant differences among the groups in their ratings of their participation in JTP-Ohio programs. As noted earlier, all of the ratings for all of the groups are significantly higher than the midpoint of the scales. The ratings of program staff are consistently the highest, the ratings of the program overall and its length rank in the middle, and the rating of the helpfulness of the program on the job the lowest. There is some tendency for females to be a little more positive on some of their ratings and minorities to be a little more negative, but these differences tend to be minor. Males and members of the "other" racial/ethnic group were more likely to report their employers required them to sign up for JTPA to get their jobs.

Table 3-3 shows the simultaneous three-way cross-classification of means/percentages for the outcomes by age, race, and gender. Cell sizes including the oldest age category and the other racial category, often are too small to justify strong conclusions. The primary patterns observed in table 3-2 tend to persist in table 3-3. The curvilinear relationship between age and earnings, however, is found for females only in the other racial group. It is present for all males.[3] Where sample sizes are moderate to large, blacks generally earn less and work less than whites or others, but the difference in earnings between blacks and whites is much smaller among females than among males. Females also earn less and work less than males. The earnings discrepancy between males and females is smallest among blacks. The large racial/ethnic differences in the likelihood of receiving public assistance also hold up within age and gender categories.

The general pattern of participants' ratings also persists in table 3-3 with no apparent interactions among the classification variables. Minorities and older workers are more likely to report JTPA assisted them to find their jobs, and males are more likely to report their employers required them to sign up for JTPA.

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[3] Statistical tests of all the possible relationships are not reported because there are too many of them to tabulate conveniently.

TABLE 3-3

TITLE IIA MEANS/PERCENTAGES BY RACE, GENDER, AND AGE (MULTIVARIATE)
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	White						Black						Other					
	Male			Female			Male			Female			Male			Female		
	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+
Average Number of Weeks Worked during Follow-Up	8.99	9.16	8.80	8.29	7.70	8.70	6.73	6.60	8.17	6.58	6.42	4.22	9.47	8.74	3.03	7.34	7.50	8.00
Average Weekly Earnings at Follow-Up	244.26	278.34	219.22	183.95	183.26	152.16	188.76	220.33	157.09	178.63	170.48	172.99	221.16	257.43	250.00	162.99	174.34	101.00
Employment Rate at Follow-Up	67.41	70.13	64.31	62.20	58.27	60.39	48.64	50.56	60.80	46.82	47.14	26.98	70.98	65.39	23.29	57.25	62.90	63.99
Education Status at Follow-Up. Percentage of Individuals Receiving Education	3.53	3.55	0	4.20	3.12	.93	3.21	2.45	14.25	3.56	4.01	0	2.59	7.77	24.02	8.24	6.78	36.01
Welfare Status at Follow-Up. Percentage of Individuals on Welfare	20.38	19.76	7.37	32.07	29.87	5.52	42.52	35.55	14.26	54.44	55.05	21.10	23.58	32.99	63.20	51.32	37.81	0
Clients' Average Ratings Program Length	2.55	2.50	2.59	2.57	2.55	2.58	2.34	2.23	2.38	2.43	2.40	1.99	2.36	2.33	1.86	2.45	2.70	3.00
Staff	3.26	3.28	3.27	3.30	3.33	3.29	3.17	3.21	3.46	3.20	3.23	3.42	3.36	3.08	2.67	3.52	3.14	4.00
Program overall	3.13	3.11	3.06	3.24	3.18	3.02	3.09	3.10	3.37	3.12	3.12	3.45	3.39	3.03	2.67	3.21	3.02	4.00
Help on job	2.46	2.44	2.55	2.53	2.63	2.55	2.46	2.53	4.00	2.53	2.62	2.38	2.70	2.52	0	2.46	2.71	2.92
Percentage JTPA Assisted to Find Job	34.59	34.93	48.51	29.46	30.93	43.06	38.88	44.28	67.12	45.82	41.99	31.20	47.19	61.80	0	32.95	59.57	0
Percentage of Employers Required JTPA Sign up	20.39	21.70	15.83	14.73	12.51	17.33	21.22	17.06	13.88	13.45	13.51	3.61	25.75	30.94	0	16.90	41.77	36.01
Response Rate	80.82	83.03	92.54	79.13	84.05	94.94	65.20	66.93	68.75	72.92	77.21	91.30	81.08	76.92	100.00	86.27	80.39	100.00
Sample Size	1523	1786	106	1193	1561	79	431	511	16	601	588	23	74	78	4	51	51	2

NOTE: Many of the differences among the means and percentages in this table are statistically significant. Individual differences are too numerous to display.

The data in table 3-3 are multivariate; they present relationships between each independent variable (age, race, gender) while controlling for the other two independent variables. It is possible to examine how the relationship between any outcome and each independent variable differs across levels of the other two independent variables. This detail comes at the expense of loss of sample size and difficulty of interpretation, however.

The data in table 3-4 present a multivariate analysis that is different than the data in table 3-3. Each average/percentage in table 3-4 is adjusted for an array of control variables. Separate multiple regressions were conducted for each outcome. Each regression equation contained age (using the same three categories as before), race, and gender plus numerous additional controls. The means are adjusted in such a way that their differences always equal the value of a corresponding regression coefficient and their weighted average over all categories of each independent variable equals the overall average (grand mean).

The independent variables included in the regressions are defined in chapter 2. It should be noted again that the complete OBES file was available for approximately one-third of the total sample. It is only with these clients for whom complete data were available that the multiple regression analyses were run. The characteristics of the subsample are very similar to the full sample and the relationships among the variables are also likely to be similar. On two of the outcome variables, however, the subsample is significantly higher than the full sample. The mean weekly earnings of those who were employed in week 13 are $16 higher in the subsample ($234 compared to $218), and the percentage attending school when interviewed is 5.1 percentage points higher (8.6% compared to 3.5%). The other outcome variables did not differ significantly.

The extensive set of control variables used to produce the results in table 3-4 statistically "equalize" the effects of differences among participants that existed prior to their entry into JTP-Ohio. Despite the use of these controls, older workers, and females were still found to earn less than younger workers, and males. Since these controls include indicators of education and work experience (human capital) that influence earnings, the results suggest that older workers and females tend to be disproportionately found in occupations that pay less than the occupations of younger male workers with similar levels of education and previous experience. On the positive side, the lower earnings of blacks found in the PY 1986 follow-up were not repeated this year, but minorities did work significantly fewer weeks during the follow-up period.

The much higher incidence of public assistance among females shown in table 3-2 is eliminated when controls for preexisting differences among participants are used to produce the results in

TABLE 3-4
TITLE IIA ADJUSTED MEANS BY AGE, BY RACE, AND BY GENDER
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked During Follow-Up	7.91	8.08	7.72	8.26	7.37	*** 7.08	8.19	7.78
Employment Rate at Follow-Up	58.36	61.74	47.69	62.31	53.00	**** 57.26	62.60	** 56.54
Average Weekly Earnings at Follow-Up	222.00	247.03	** 181.52	233.06	236.08	232.01	270.37	**** 191.99
Education Status at Follow-Up. Percentage of Individuals Receiving Education	12.71	6.53	**** 0	8.53	8.53	10.94	7.35	*** 10.05
Welfare Status at Follow-Up. Percentage of Individuals on Welfare	29.84	27.81	21.84	25.85	34.87	**** 36.39	29.63	27.19
Clients' Average Ratings Program length	2.59	2.52	* 2.34	2.60	2.40	**** 2.50	2.56	2.54
Staff	3.21	3.18	3.29	3.25	3.04	**** 3.21	3.16	3.23
Program overall	3.10	3.06	3.02	3.08	3.05	3.15	3.06	3.09
Help on job	2.49	2.53	2.70	2.55	2.44	2.60	2.53	2.51
Percentage JTPA Assisted to Find Job	32.02	34.18	34.95	32.84	35.85	22.15	34.25	32.13
Percentage of Employers Required JTPA Sign up	15.43	21.32	** 17.58	19.25	16.68	19.80	20.20	16.79

table 3-4. This was one of the more surprising findings from the PY 1986 data and it is repeated in the current data. The elimination of the gender difference by controlling welfare status at application means females are no more likely to change their status from application to follow-up than males. Racial differences in the percentage receiving welfare are also substantially reduced by the controls, but remain statistically significant. Minorities are more likely than whites to receive welfare at follow-up, even when their welfare status at application is controlled.

With other characteristics controlled, blacks give lower ratings to the length of their JTPA program and to the staff. Workers in the 30-54 age range were significantly more likely to be required to sign up for JTPA by their employers.

Table 3-5 displays the relationships between each outcome and age, race, and gender separately for those who were receiving public assistance and those who were not receiving public assistance at the time of application. The advantage of table 3-5 over table 3-4 is that one can determine from table 3-5 whether the basic relationships are different for those receiving public assistance at the time of application than for those who were not. It turns out that the relationships are not different. As would be expected, those who were not receiving welfare at application have much better labor market experiences. They are far more likely to be employed, to have worked more weeks during the follow-up period, and to earn more, and far less likely to be receiving public assistance. The primary patterns of differences in the outcomes among the age categories, among the racial groups, and between males and females, however, are the same irrespective of whether or not the respondent was receiving public assistance at the time of application.

Table 3-6 presents the simultaneous cross-tabulations of means/percentages on the outcomes by welfare status at application, age, race, and gender. Sample sizes here often are too small to allow firm conclusions, but the main patterns observed in table 3-3 also show up in table 3-6.

Table 3-7 shows adjusted means by age, by race, and by gender separately for those on public assistance at application and those not on public assistance. Identical procedures used for table 3-4 were used here, (except that welfare status at application was used to sort the respondents into two groups and was not included in the regression specifications). The curvilinear relationship between age and earnings noted above remains, but it is not statistically significant for those on welfare at application. Blacks who were receiving public assistance at application worked fewer weeks and were less likely to be employed at follow-up. As shown in earlier tables, however, there were no significant differences across racial groups in the earnings of those who were employed when contacted. Gender differences in earnings are

TABLE 3-5

TITLE IIA MEANS/PERCENTAGES FOR WELFARE RECIPIENTS AND FOR NONWELFARE RECIPIENTS BY AGE, BY RACE, AND BY GENDER
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked during Follow-Up	6.92	6.56	6.81	7.42	5.65	**** 7.47	7.17	*** 6.40
Employment Rate at Follow-Up	50.50	49.72	50.12	55.83	40.90	**** 57.88	53.41	**** 47.62
Average Weekly Earnings at Follow-Up	193.64	201.30	** 122.76	206.93	176.78	**** 194.04	227.36	**** 171.52
Education Status at Follow-Up. Percentage of Individuals Receiving Education.	3.26	3.49	3.02	3.17	3.47	** 6.15	2.65	**** 3.92
Welfare Status at Follow-Up. Percentage of Individuals on Welfare.	52.11	52.82	* 40.86	45.07	63.10	**** 54.55	45.14	**** 57.65
Client's Average Ratings Program length	2.49	2.41	2.40	2.52	2.36	**** 2.30	2.40	* 2.48
Staff	3.27	3.28	3.03	3.32	3.20	*** 3.13	3.25	3.28
Program overall	3.16	3.14	3.10	3.17	3.12	3.03	3.12	3.17
Help on job	2.54	2.61	2.63	2.54	2.64	2.54	2.52	2.62
Percentage JTPA Assisted to Find Job	35.85	40.08	** 39.36	32.56	46.74	**** 48.69	40.92	**** 35.65
Percentage of Employers Required JTPA Sign up	16.89	15.90	14.24	16.62	15.18	** 23.51	19.82	**** 13.42
Response Rate	76.24	78.65	83.33	80.34	72.28	74.07	76.84	78.12
Sample Size	2121	2356	36	2924	1454	135	1995	2518

Table 3-5--Continued

Not Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked During Follow-Up	9.42	9.32	*** 7.89	9.55	8.34	**** 9.03	9.49	** 8.96
Employment Rate at Follow-Up	70.98	70.84	**** 55.48	72.29	62.06	**** 69.30	72.31	**** 66.73
Average Weekly Earnings at Follow-Up	222.44	246.01	**** 196.59	241.82	204.12	**** 223.02	263.42	**** 188.41
Education Status at Follow-Up. Percentage of Individuals Receiving Education.	4.38	3.41	** 1.93	3.69	3.16	**** 7.72	4.01	3.30
Welfare Status at Follow-Up. Percentage of Individuals on Welfare.	9.93	7.53	**** 3.88	6.48	13.38	**** 17.50	8.20	8.42
Client's Average Ratings Program length	2.51	2.52	2.44	2.56	2.34	**** 2.55	2.50	2.54
Staff	3.24	3.27	3.38	3.27	3.23	3.36	3.24	3.29
Program overall	3.17	3.13	3.16	3.14	3.13	3.35	3.12	* 3.19
Help on job	2.46	2.48	2.64	2.49	2.42	2.65	2.44	2.53
Percentage JTPA Assisted to Find Job	35.61	33.79	**** 45.63	33.86	37.42	**** 50.62	35.29	34.92
Percentage of Employers Required JTPA Sign up	18.67	18.89	14.58	18.59	16.32	**** 32.20	21.28	**** 14.53
Response Rate	78.69	82.25	93.78	84.13	69.41	86.04	80.41	83.59
Sample Size	1755	2217	193	3320	716	129	2532	1633

TABLE 3-6

TITLE IIA MEANS/PERCENTAGES BY GENDER, RACE, AGE: AND BY WELFARE STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Females: Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Average Number of Weeks Worked during Follow-Up	7.23	6.58	10.99	5.96	5.56	0.73	6.62	7.46	8.00
Employment Rate at Follow-Up	53.63	49.97	86.07	42.26	40.96	0	53.68	69.88	100.00
Average Weekly Earnings at Follow-Up	179.45	177.05	99.81	172.18	157.29	0	136.63	179.89	101.00
Education Status at Follow-Up. Percentage of Individuals Receiving Education	3.32	3.93	0	3.19	4.92	0	5.99	12.43	0
Welfare Status at Follow-Up. Percentage of Individuals on Welfare	48.59	49.95	27.58	65.06	72.67	36.39	66.63	59.27	0
Client's Average Retings									
Program length	2.56	2.51	2.81	2.42	2.41	1.44	2.40	2.56	3.00
Staff	3.33	3.35	2.93	3.22	3.21	2.86	3.49	3.06	4.00
Program overall	3.24	3.17	2.65	3.11	3.15	3.37	3.23	2.92	4.00
Help on job	2.55	2.65	1.57	2.62	2.74	3.00	2.59	2.40	4.00
Percentage JTPA Assisted to Find Job	23.41	29.97	9.68	48.25	48.33	0	36.21	61.77	0
Percentage of Employers Required JTPA Sign up	12.99	11.72	13.80	15.85	12.11	0	14.48	41.19	0
Response Rate	80.06	83.43	90.91	75.00	78.28	100.00	78.12	72.41	100.00
Number in Category	712	797	11	456	419	5	32	29	1

Table 3-6--Continued

Females: Not Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Average Number of Weeks Worked during Follow-Up	9.91	8.91	8.23	8.74	8.62	5.45	8.71	7.55	8.00
Employment Rate at Follow-Up	75.28	67.35	55.16	62.75	62.94	36.52	63.95	54.54	0
Average Weekly Earnings at Follow-Up	188.84	188.30	168.78	193.85	192.43	172.99	204.59	165.82	0
Education Status at Follow-Up. Percentage of Individuals Receiving Education	5.54	2.23	1.12	4.88	1.67	0	12.42	0	100.00
Welfare Status at Follow-Up. Percentage of Individuals on Welfare	6.71	7.65	0.99	15.56	8.87	14.99	22.52	14.41	0
Client's Average Ratings Program length	2.57	2.60	2.52	2.48	2.36	2.17	2.56	2.95	0
Staff	3.24	3.32	3.36	3.16	3.27	3.64	3.57	3.26	0
Program overall	3.24	3.19	3.10	3.15	3.06	3.48	3.18	3.16	0
Help on job	2.50	2.62	2.73	2.28	2.44	2.31	2.23	3.14	1.00
Percentage JTPA Assisted to Find Job	36.57	31.73	50.52	39.48	31.93	34.26	27.46	56.85	0
Percentage of Employers Required JTPA Sign up	16.83	13.18	18.13	7.24	15.91	3.97	20.99	42.49	100.00
Response Rate	81.48	85.70	94.20	71.85	77.78	84.21	100.00	90.90	50.00
Number in Category	459	755	69	135	162	19	19	22	2

Table 3-6--Continued

Males: Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Average Number of Weeks Worked during Follow-Up	7.82	8.14	8.03	6.04	5.17	13.00	10.03	7.37	0
Employment Rate at Follow-Up	58.71	61.82	50.41	40.37	39.99	100.00	68.22	50.67	0
Average Weekly Earnings at Follow-Up	228.04	246.23	181.47	194.06	201.59	127.50	201.61	280.04	0
Education Status at Follow-Up. Percentage of Individuals Receiving Education	3.42	2.03	0	2.80	2.41	0	0	2.83	38.00
Welfare Status at Follow-Up. Percentage of Individuals on Welfare	39.95	40.47	45.27	58.56	51.03	50.00	34.94	47.96	100.00
Client's Average Ratings									
Program length	2.52	2.45	2.76	2.43	2.14	3.00	2.11	2.18	1.62
Staff	3.27	3.32	3.17	3.17	3.20	3.50	3.18	2.81	2.62
Program overall	3.15	3.13	3.26	3.08	3.10	3.50	3.07	2.85	2.62
Help on job	2.48	2.50	2.76	2.45	2.67	4.00	2.73	2.36	0
Percentage JTPA Assisted to Find Job	36.01	40.20	66.37	39.96	46.96	100.00	55.81	49.12	0
Percentage of Employers Required JTPA Sign up	19.03	22.39	30.88	22.58	13.10	0	29.11	15.81	0
Response Rate	81.89	81.99	76.92	67.83	71.01	50.00	70.97	78.38	100.00
Number in Category	613	722	13	230	307	4	31	37	2

Table 3-6--Continued

Males: Not Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Average Number of Weeks Worked during Follow-Up	9.79	9.85	8.89	7.62	9.04	6.24	9.15	10.00	8.23
Employment Rate at Follow-Up	73.36	75.70	66.02	59.33	68.59	45.16	72.56	79.05	63.27
Average Weekly Earnings at Follow-Up	253.29	295.90	222.77	184.10	238.98	183.22	231.64	243.96	250.00
Education Status at Follow-Up. Percentage of Individuals Receiving Education	3.61	4.57	0	3.74	2.51	19.94	4.07	12.37	0
Welfare Status at Follow-Up. Percentage of Individuals on Welfare	6.92	6.01	2.71	21.39	9.88	0	17.25	18.22	0
Client's Average Ratings Program length	2.56	2.53	2.56	2.23	2.38	2.12	2.47	2.47	3.00
Staff	3.25	3.24	3.29	3.18	3.21	3.44	3.45	3.22	3.00
Program overall	3.12	3.09	3.03	3.12	3.11	3.31	3.54	3.28	3.00
Help on job	2.46	2.40	2.53	2.47	2.37	4.00	2.68	2.64	0
Percentage JTPA Assisted to Find Job	33.81	31.82	46.39	37.62	41.10	46.98	42.23	70.56	0
Percentage of Employers Required JTPA Sign up	21.19	21.29	14.05	19.58	21.76	22.39	23.80	42.28	0
Response Rate	81.25	79.13	86.27	64.43	62.94	69.23	88.37	75.61	66.67
Number in Category	896	1126	102	194	197	13	43	41	3

NOTE: Many of the differences among the means and percentages in this table are statistically significant. Individual differences are too numerous to display.

TABLE 3-7

TITLE IIA ADJUSTED MEANS/PERCENTAGES FOR WELFARE RECIPIENTS AND NONWELFARE RECIPIENTS BY AGE, BY RACE, AND BY GENDER
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked During Follow-Up	6.17	6.31	5.74	6.66	5.53	*** 5.95	6.26	6.22
Employment Rate at Follow-Up	45.57	48.27	31.74	50.16	40.68	** 48.79	48.25	45.74
Average Weekly Earnings at Follow-Up	192.79	210.01	194.89	206.82	196.94	167.25	240.65	**** 173.19
Education Status at Follow-Up. Percentage of Individuals Receiving Education.	12.33	5.67	**** 0	7.74	9.77	* 10.14	7.92	9.00
Welfare Status at Follow-Up. Percentage of Individuals on Welfare.	55.13	55.03	37.65	50.68	60.57	** 67.53	57.21	52.99
Client's Average Ratings Program length	2.57	2.49	2.41	2.56	2.45	** 2.53	2.56	2.54
Staff	3.20	3.15	3.28	3.22	3.03	** 3.19	3.16	3.20
Program overall	3.08	3.06	3.02	3.07	3.04	3.13	3.06	3.08
Help on job	2.53	2.57	2.80	2.58	2.45	2.63	2.59	2.53
Percentage JTPA Assisted to Find Job	35.23	36.27	37.11	33.71	37.11	23.67	35.82	33.02
Percentage of Employers Required JTPA Sign up	16.40	22.01	18.22	19.38	17.00	20.72	21.12	18.04

Table 3-7--Continued

Not Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked During Follow-Up	9.21	9.40	9.38	9.43	9.01	8.06	9.57	* 8.92
Employment Rate at Follow-Up	67.90	71.76	59.86	71.16	63.32	* 64.72	72.85	** 64.23
Average Weekly Earnings at Follow-Up	235.40	267.25	** 190.65	247.95	257.55	257.72	280.69	**** 200.92
Education Status at Follow-Up. Percentage of Individuals Receiving Education.	12.84	7.31	**** 0	8.98	6.82	11.98	7.23	*** 10.96
Welfare Status at Follow-Up. Percentage of Individuals on Welfare.	11.04	6.91	* 3.44	7.46	12.78	* 8.07	8.88	7.78
Client's Average Ratings Program length	2.61	2.55	* 2.27	2.64	2.34	** 2.48	2.57	2.53
Staff	3.22	3.21	3.31	3.28	3.04	** 3.23	3.20	3.24
Program overall	3.12	3.06	3.01	3.08	3.05	3.14	3.06	3.09
Help on job	2.48	2.50	2.55	2.53	2.44	2.58	2.53	2.48
Percentage JTPA Assisted to Find Job	30.17	33.12	32.82	31.22	34.92	20.18	33.43	31.53
Percentage of Employers Required JTPA Sign up	14.38	20.62	17.13	18.62	16.24	18.74	19.23	15.34

strong irrespective of welfare status at application. Gender differences in employment and weeks worked occur only among those who were not welfare recipients at the time of application. Blacks give lower ratings of some of their experience while in JTP-Ohio regardless of welfare status.

JTP Ohio Services and Reasons for Termination

Services received by JTP-Ohio clients were classified into three types--occupational classroom training, OJT, and job search assistance. Reasons for termination were classified into five categories: (1) entered employment, (2) exceeded program duration limits (C12), (3) exceeded 90-day hold limit (C14), (4) poor attendance (C06, C07), and (5) other. A primary goal of the analysis is to determine the impacts of services and reason for termination on the eleven outcome variables.

In conducting these analyses, it was assumed that services and reason for termination are sequential rather than simultaneous, as depicted in figure 3-1.

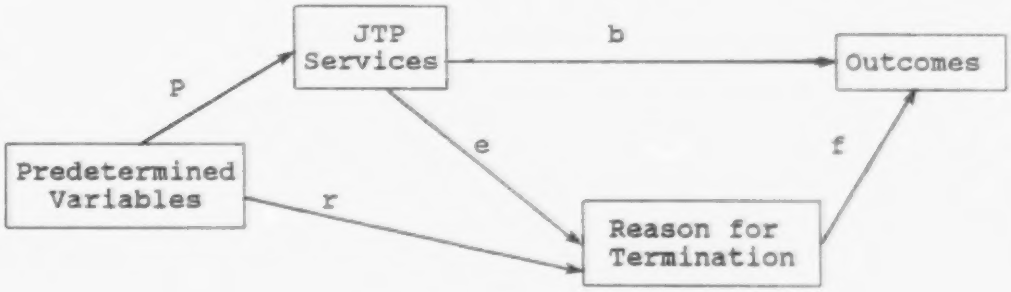

Figure 3-1. Model of services and reason for termination on outcomes.

To observe the total effects of services, one must exclude control for reason for termination. To observe the direct effect of services, control for reason for termination must be added. In figure 3-1, the direct effect is represented by arrow b. The total effect is the sum of the direct effect and the indirect effect: b + ef. This type of analysis is counter-intuitive in that total effect is calculated by eliminating an explanatory variable. When reason for termination is in the equation, it explains all variability in the outcomes that is uniquely associated with it. Thus the estimates of the total effects of JTP services are reduced to the degree these effects are due to reason for termination.

As a base of comparison, table 3-8 shows the bivariate relationships between each of the outcomes and type of service; these differences show the basic relationships without any controls. From these results one would conclude that classroom instruction has an effect opposite that intended. Clients who received such instruction worked fewer weeks and were more likely to be unemployed and receiving welfare when followed up. Those who received OJT, in contrast, were significantly more positive on almost all the outcome variables. Note especially the differences in the percentage of clients receiving OJT who reported JTPA assisted them to find their jobs and that their employers required them to sign up for JTPA.

Table 3-9 displays the same relationships, first under control for all independent variables except reason for termination (Tot Eff), then for all the factors used as controls in previous tables including reason for termination (Dir Eff). It is clear from table 3-9 that the JTP services do influence the outcomes. Most of the apparent negative effects of classroom instruction are eliminated, except for the direct effect on welfare status, and a statistically significant income advantage emerged. With the controls added, job search also is found to yield significant advantages in weeks worked, employment rate at follow-up, and percentage assisted to find jobs, and the earnings disadvantage is eliminated. All of the significant advantages found for OJT remain when the controls are added.

The importance of reason for termination as a mediating factor between services and the outcomes is supported in table 3-9, but not to the same degree as in the PY 1986 results. As in 1986, many of the total effects are reduced after controlling for reason for termination, but still remain statistically significant. The only significant difference that can be attributed primarily to reason for termination is the higher rate of employment among those who took part in job search. This result replicates a 1986 finding that a job search's primary impact on employment variables after 13 weeks is determined by whether the search was successful. A successful job search is indicated by "entered employment." Entered employment is the most important category of the variable reason for termination.

A substantial part of the total effect of OJT on weeks worked and employment at follow-up also operates through reason for termination. Many individuals receiving OJT continue working in the firm where they received the OJT after ending their JTP-sponsored training.

The importance of implementing controls is well illustrated by contrasts between tables 3-8 and 3-9. Statistical controls reverse the estimates of the apparent negative effects of classroom training and decrease the positive effects of OJT. These results can be explained by differences in the characteristics of clients who are receive different services. Those assigned to

TABLE 3-8

TITLE IIA AVERAGES/PECENTAGES BY TYPE OF SERVICE
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Dependent Variables	Classroom Instruction		Job Search		OJT	
	Yes	No	Yes	No	Yes	No
Average Number of Weeks Worked during Follow-Up	6.88	**** 8.69	8.43	8.14	10.23	**** 7.50
Employment Rate at Follow-Up	51.60	**** 64.37	62.03	60.70	76.53	**** 55.58
Average Weekly Income at Follow-Up	221.17	233.07	217.21	* 235.63	262.96	**** 214.62
Welfare Status at Follow-Up Percentage of Terminees on Welfare	39.17	**** 27.45	30.25	30.58	13.99	**** 36.09
Education Status at Follow-Up Percentage of Terminees Receiving Education	11.27	**** 7.53	5.83	**** 9.51	9.39	8.18
Client's Average Ratings Program length	2.38	**** 2.61	2.63	* 2.51	2.67	*** 2.49
Staff	3.20	3.16	3.23	3.15	3.14	3.19
Program overall	3.10	3.05	3.03	3.07	3.11	3.04
Help on job	2.64	* 2.47	2.39	* 2.57	2.83	**** 2.37
Percentage JTPA Assisted to Find Job	27.26	**** 36.37	33.91	34.34	47.09	**** 28.37
Percentage of Employers Required JTPA Sign up	5.55	**** 22.07	6.37	**** 23.34	46.54	**** 5.51
Response Rate	79.12	77.08	79.02	77.17	88.51	73.30
Sample Size	661	1837	610	1888	705	1794

TABLE 3-9

TITLE IIA ADJUSTED MEANS/PERCENTAGES BY TYPES OF SERVICES
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables		Classroom Instruction		Job Search		OJT	
		Yes	No	Yes	No	Yes	No
Average Number of Weeks Worked during Follow-Up	Tot Eff	8.32	7.88	9.35	**** 7.47	10.08	**** 7.21
	Dir Eff	8.02	7.99	8.56	** 7.77	9.07	**** 7.59
Employment Rate at Follow-Up	Tot Eff	61.17	59.29	67.62	*** 56.72	73.85	**** 54.47
	Dir Eff	59.33	59.92	62.53	58.70	67.24	*** 56.96
Average Weekly Income at Follow-Up	Tot Eff	252.42	* 227.35	241.57	230.77	266.36	**** 221.53
	Dir Eff	253.32	* 227.04	242.55	230.39	265.80	**** 221.74
Welfare Status at Follow-Up	Tot Eff	31.72	27.37	26.50	29.27	20.18	**** 31.62
	Dir Eff	33.17	* 26.87	29.73	28.01	24.46	* 30.01
Education Status During Follow-Up	Tot Eff	8.95	8.50	8.31	8.73	8.85	8.52
	Dir Eff	9.02	8.47	8.43	8.68	8.93	8.49
Client's Average Ratings							
Program length	Tot Eff	2.50	2.56	2.68	** 2.49	2.68	** 2.49
	Dir Eff	2.49	2.56	2.65	* 2.50	2.66	* 2.50
Staff	Tot Eff	3.22	3.19	3.25	3.18	3.10	* 3.24
	Dir Eff	3.21	3.19	3.23	3.19	3.08	** 3.25
Program overall	Tot Eff	3.12	3.06	3.09	3.07	3.09	3.07
	Dir Eff	3.11	3.06	3.07	3.08	3.06	3.08
Help on job	Tot Eff	2.93	* 2.38	2.71	**** 2.44	3.02	**** 2.33
	Dir Eff	2.94	**** 2.38	2.69	* 2.46	2.99	**** 2.34
Percentage JTPA Assisted to Find Job	Tot Eff	39.10	31.24	43.84	*** 29.15	50.15	**** 26.90
	Dir Eff	39.38	* 31.14	43.60	*** 29.24	49.67	**** 27.08
Percentage of Employers Required JTPA Sign up	Tot Eff	18.90	18.51	19.96	18.09	47.71	**** 7.65
	Dir Eff	19.28	18.38	19.94	18.09	47.64	**** 7.67

classroom training are more likely to be welfare recipients at the time of application and to have had limited labor market experience. Handicapped individuals and exoffenders are less likely to receive OJT than others. Males are more likely to receive OJT than females, blacks are less likely to receive OJT than whites, and those who worked many weeks in the year prior to training are more likely to receive OJT than those who worked few weeks. Thus, the primary predictors of classroom training have a negative impact on the labor market outcomes; whereas, the main predictors of OJT have positive effects on the outcomes. These results explain why the relationships in table 3-8 between classroom training and the labor market outcomes are reversed after controls are introduced (table 3-9), while the original associations between OJT and the five outcomes are reduced in magnitude by the addition of controls. In brief, the explanation is that hard-to-serve individuals tend to be assigned to classroom training; whereas, the opposite is true of OJT.

Tables 3-10 and 3-11 report bivariate and multivariate adjusted means, respectively, according to reason for termination. Strong effects are associated with the reason for termination. Those who entered employment are almost three times as likely to be employed at follow-up, work almost seven more weeks during the 13-week follow-up period, earn much more per week if they are employed, and are much less likely to be on welfare than those who did not enter employment. All of these difference persist when the additional controls are added. These results are quite similar to those found for PY 1986, adding additional evidence to the importance of entering employment. The one anomalous result found in 1986--when controls were included those who exceeded the program duration earned more than any other group--was not repeated in the current analysis.

The combined results of tables 3-9 and 3-11 show that reason for termination is a pivotal factor in determining the outcomes. Table 3-11 documents that entered employment makes a strong independent contribution to all labor market outcomes. Table 3-9 shows that reason for termination is an important intervening variable between JTP services and the outcomes.

Predetermined Variables

This section presents analyses of the relationships between the eleven outcomes and five independent variables that are likely to influence the outcomes. These five independent variables are employment status, family status, welfare status, education status, and barriers to employment. All of these characteristics were measured at the time of application, except education status which was obtained from the follow-up survey. These variables were included as controls in the regressions already presented; this section examines their specific effects. For each relationship, bivariate mean and percentages differences are presented as

TABLE 3-10

TITLE IIA AVERAGE/PERCENTAGES BY REASON FOR TERMINATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Entered Employment A01-A05	Exceeded Program C-12	Exceeded 90-Day C-14	Poor Attendance (C06,C07)	Other
Average Number of Weeks Worked during Follow-Up	10.20	2.96	3.47	3.35	**** 2.90
Employment Rate at Follow-Up	74.79	22.23	29.36	28.98	**** 26.30
Average Weekly Income at Follow-Up	223.95	167.54	184.84	179.06	**** 180.49
Welfare Status at Follow-Up Percentage of Terminees on Welfare	19.72	57.75	58.48	60.70	**** 53.90
Education Status at Follow-Up Percentage of Terminees Receiving Education	2.99	0.84	4.12	5.47	**** 5.79
Client's Average Ratings Program length	2.53	2.33	2.30	2.43	**** 2.37
Staff	3.29	3.20	3.23	3.19	*** 3.19
Program overall	3.19	3.01	3.03	3.04	**** 3.10
Help on job	2.64	1.92	1.87	1.86	**** 2.01
Percentage JTPA Assisted to Find Job	40.74	15.62	12.55	6.72	**** 17.29
Percentage of Employers Required JTPA Sign up	19.55	7.90	4.76	5.62	**** 7.96
Response Rate	87.76	72.85	68.98	67.05	61.11
Sample Size	5513	302	635	698	1535

TABLE 3-11

TITLE IIA ADJUSTED MEANS/PERCENTAGES BY REASON FOR TERMINATION QUARTER 4, PROGRAM YEAR 1986QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Entered Employment (A01-A05)	Exceeded Program (C12)	Exceeded 90-Day (C14)	Poor Attendance (C06,C07)	Other
Average Number of Weeks Worked during Follow-Up	10.26	3.76	3.40	3.35	**** 2.97
Employment Rate at Follow-Up	74.68	30.95	30.02	31.26	**** 25.53
Average Weekly Income at Follow-Up	245.94	151.03	195.00	211.80	* 224.42
Welfare Status at Follow-Up Percentage of Terminees on Welfare	19.20	50.29	47.63	49.78	**** 46.58
Education Status at Follow-Up Percentage of Terminees Receiving Education	8.48	7.67	8.46	9.51	8.95
Client's Average Ratings Program length	2.59	2.69	2.35	2.56	*** 2.38
Staff	3.24	3.26	3.14	3.16	*** 3.03
Program overall	3.13	3.03	2.82	2.95	* 3.04
Help on job	2.76	2.32	1.93	1.93	**** 2.02
Percentage JTPA Assisted to Find Job	41.53	6.75	12.46	7.90	*** 24.38
Percentage of Employers Required JTPA Sign up	21.61	9.06	7.29	14.00	14.41

a basis of comparison and adjusted means are shown to assess net impacts of the independent variables on the outcomes. The independent variables included here and procedures for calculating adjusted means are the same as those used previously. Tables 3-12 to 3-21 show the results.

The simple comparisons show education has a statistically significant impact on 9 of the 11 outcomes. Unlike some of the results from PY 1986, most of the differences among the educational levels are in the expected direction. That is, more education is associated with more positive outcomes. The exception to this pattern is the adjusted percentage of college graduates receiving welfare at follow-up. This percentage is the same as the percentage for high school graduates and higher than the percentage with some college. Dropouts were more positive about their experiences in JTP-Ohio and much more likely to report that the program assisted them to find their jobs. This finding is another of several that indicates JTP staff are directing the most services to those with the most need.

Welfare status at application has a statistically significant association with the labor market and welfare status outcomes in tables 3-14 and 3-15. The anomalies observed in the PY 1986 results are not present in the current data. Those who were welfare recipients at application work less, earn less and are much more likely to be recipients at follow-up than those who were not recipients at application.

The direct comparison of different family types (table 3-16) yields significant differences in directions that appear reasonable: single parents work less, earn less and are more likely to receive welfare. Most of these differences were not found, however, when the controls for other characteristics were introduced in table 3-17. Only the higher percentage of welfare status remained, and the differences among the family types were much less than in table 3-16. The direction of differences in weekly income underwent a major and statistically significant reversal with single parents of children six and younger having the highest average.

The effects of the barriers to employment (ex-offender, handicapped, limited English proficiency) are smaller than one might expect (table 3-18) but very consistent with the pattern found in PY 1986. In the previous survey the LEP clients were also found to have highest employment. These differences persist when the additional control variables are added in table 3-19.

Some of the most mixed results of bivariate and multivariate analysis are found by comparing tables 3-20 and 3-21. Table 3-20 shows the expected advantages for being employed at application, except for average weekly income. When additional controls are introduced, however, it is those who were not in the labor force at application who are found to have been employed the most weeks during the follow-up period. It is those who were unemployed at application who are most likely to be unemployed at follow-up, but those in this group who were employed earned the highest weekly income. The analysis of the PY 1986 data found similar, but not identical, anomalous results for employment status at application. Employment status is apparently an unreliable predictor of the likelihood that clients will benefit from JTP-Ohio services.

These analyses indicate the importance of controlling for differences in the individual characteristics and previous experiences of clients to derive valid conclusions regarding the impacts of JTP-Ohio services. Just as performance standards are based on a regression model that controls for the major characteristics of the clients that are served, the analysis of follow-up data on these clients should use similar controls.

A summary of the major findings from this and the other chapters and a discussion of their implications are presented in chapter 7.

TABLE 3-12

TITLE IIA MEANS/PERCENTAGES BY EDUCATION STATUS
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Dropout	H.S. Graduate	Some College	College Grad.
Average Number of Weeks Worked during Follow-Up	7.13	8.00	8.08	**** 9.56
Employment Rate at Follow-Up	53.20	60.31	60.44	**** 70.98
Average Weekly Income at Follow-Up	199.28	213.40	229.42	**** 255.02
Welfare Status at Follow-Up Percentage of Terminees on Welfare	39.94	31.07	29.32	**** 17.81
Education Status at Follow-Up Percentage of Terminees Receiving Education	8.19	1.12	4.32	**** 3.40
Client's Average Ratings Program length	2.53	2.46	2.42	** 2.56
Staff	3.28	3.27	3.24	3.24
Program overall	3.19	3.16	3.08	** 3.12
Help on job	2.56	2.51	2.52	2.54
Percentage JTPA Assisted to Find Job	42.74	36.45	33.95	**** 29.32
Percentage of Employers Required JTPA Sign up	20.17	18.68	14.67	**** 12.19
Response Size	1604	3432	1358	508

NOTE: Education status was defined by survey response. It is not possible to calculate response rate because education status could not be obtained for those in the original sample who were not interviewed.

TABLE 3-13

TITLE IIA ADJUSTED MEANS/PERCENTAGES BY EDUCATION STATUS
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Dropout	H.S. Graduate	Some College	College Grad.
Average Number of Weeks Worked during Follow-Up	7.58	7.88	8.59	** 8.39
Employment Rate at Follow-Up	55.94	59.92	62.64	63.84
Average Weekly Income at Follow-Up	219.39	229.32	244.50	*** 279.63
Welfare Status at Follow-Up Percentage of Terminees on Welfare	36.45	27.33	21.64	**** 27.75
Education Status at Follow-Up Percentage of Terminees Receiving Education	14.64	3.51	10.75	**** 11.53
Client's Average Ratings Program length	2.63	2.53	2.48	2.53
Staff	3.22	3.21	3.24	** 2.95
Program overall	3.16	3.07	3.03	* 2.90
Help on job	2.75	2.47	2.46	** 2.19
Percentage JTPA Assisted to Find Job	45.01	31.00	28.80	**** 18.60
Percentage of Employers Required JTPA Sign up	20.02	19.63	17.08	* 12.06

TABLE 3-14

TITLE IIA AVERAGES/PERCENTAGES BY WELFARE STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	AFDC Recipient	General	Nonwelfare
Average Number of Weeks Worked during Follow-Up	6.92	6.34	**** 9.28
Employment Rate at Follow-Up	51.49	47.32	**** 70.02
Average Weekly Income at Follow-Up	203.84	181.99	**** 234.12
Welfare Status at Follow-Up Percentage of Terminees on Welfare	53.41	50.25	**** 8.29
Education Status at Follow-Up Percentage of Terminees Receiving Education	3.19	3.76	3.72
Client's Average Ratings Program length	2.47	2.41	** 2.51
Staff	3.16	3.12	3.15
Program overall	3.28	3.24	3.26
Help on job	2.58	2.57	* 2.48
Percentage JTPA Assisted to Find Job	36.38	41.50	**** 35.14
Percentage of Employers Required JTPA Sign up	15.51	18.07	**** 18.57
Response Rate	79.51	73.61	81.66
Sample Size	3016	1497	4165

TABLE 3-15

TITLE IIA ADJUSTED MEANS/PERCENTAGES BY WELFARE STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	AFDC Recipient	General	Nonwelfare
Average Number of Weeks Worked during Follow-Up	7.62	7.43	** 8.33
Employment Rate at Follow-Up	55.96	55.61	** 62.75
Average Weekly Income at Follow-Up	216.03	210.48	** 248.69
Welfare Status at Follow-Up Percentage of Terminees on Welfare	49.80	41.13	**** 14.50
Education Status at Follow-Up Percentage of Terminees Receiving Education	9.74	8.64	8.03
Client's Average Ratings Program length	2.55	2.51	2.55
Staff	3.19	3.02	3.22
Program overall	3.10	3.02	3.08
Help on job	2.51	2.64	2.50
Percentage JTPA Assisted to Find Job	33.31	37.35	32.21
Percentage of Employers Required JTPA Sign up	19.11	18.21	18.46

TABLE 3-16

TITLE IIA AVERAGES/PERCENTAGES BY FAMILY STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Single Parent with ≥1 Child under 6 yrs	Single Parent with ≥ 1 Child 7-17 yrs	Parent in 2 Parent Home	Other Family Member	Non-Dependent
Average Number of Weeks Worked during Follow-Up	6.91	7.79	8.87	9.25	**** 8.19
Employment Rate at Follow-Up	51.25	55.46	67.60	71.49	**** 60.25
Average Weekly Income at Follow-Up	211.53	206.29	263.83	256.57	**** 213.89
Welfare Status at Follow-Up Percentages of Terminees on Welfare	52.25	43.59	24.11	13.71	**** 24.80
Education Status at Follow-Up Percentage of Terminees Receiving Education	11.43	6.42	8.90	7.84	** 8.31
Client's Average Ratings Program length	2.53	2.54	2.58	2.48	2.53
Staff	3.17	3.10	3.27	3.13	3.15
Program overall	3.09	3.00	3.15	3.01	3.03
Help on job	2.51	2.34	2.57	2.48	2.54
Percentage JTPA Assisted to Find Job	36.53	29.78	35.01	31.63	* 36.82
Percentage of Employers Required JTPA Sign up	9.13	12.20	23.43	14.90	**** 19.84
Response Rate	77.78	79.20	86.88	84.30	76.66
Sample Size	288	423	724	172	891

TABLE 3-17

TITLE IIA ADJUSTED MEANS/PERCENTAGES BY FAMILY STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Single Parent w/≥ 1 Child under 6yrs.	Single Parent with ≥ 1 Child 7-17 yrs.	Parent in 2 Parent Home	Other Family Member	Non-Dependent
Average Number of Weeks Worked during Follow-Up	7.90	8.51	7.81	8.07	7.93
Employment Rate at Follow-Up	60.20	61.74	59.48	63.07	58.39
Average Weekly Income at Follow-Up	264.58	246.23	249.95	233.52	**** 207.57
Welfare Status at Follow-Up Percentage of Terminees on Welfare	35.45	32.60	24.06	23.57	* 29.13
Education Status at Follow-Up Percentage of Terminees Receiving Education	8.24	7.77	8.47	7.00	9.49
Client's Average Ratings Program length	2.62	2.64	2.53	2.37	* 2.53
Staff	3.21	3.21	3.22	3.11	3.19
Program overall	3.11	3.00	3.09	3.08	3.08
Help on job	2.56	2.48	2.52	2.44	2.55
Percentage JTPA Assisted to Find Job	37.73	33.01	29.61	29.59	35.61
Percentage of Employers Required JTPA Sign up	14.40	15.25	19.22	10.56	** 22.32

TABLE 3-18

TITLE IIA AVERAGES/PERCENTAGES BY BARRIERS TO EMPLOYMENT AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Offender	Handicapped	Limited English	No Barrier
Average Number of Weeks Worked during Follow-Up	6.94	7.23	9.41	*** 8.40
Employment Rate at Follow-Up	54.68	51.33	70.76	**** 62.28
Average Weekly Income at Follow-Up	216.80	217.74	215.43	232.24
Welfare Status at Follow-Up Percentage of Terminees on Welfare	33.32	15.78	26.38	**** 31.44
Education Status at Follow-Up Percentage of Terminees Receiving Education	6.50	5.59	8.33	8.77
Client's Average Ratings Program length	2.53	2.64	2.34	2.53
Staff	3.10	3.20	3.13	3.18
Program overall	3.06	3.05	3.20	3.06
Help on job	2.77	2.43	2.68	2.50
Percentage JTPA Assisted to Find Job	36.04	34.28	61.65	**** 34.55
Percentage of Employers Required JTPA Sign up	12.01	13.57	40.22	**** 19.03
Response Rate	66.67	84.85	76.71	82.31
Sample Size	180	165	73	2109

TABLE 3-19

TITLE IIA ADJUSTED MEANS BY BARRIERS TO EMPLOYMENT
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Offender	Handicapped	Limited English	No Barrier
Average Number of Weeks Worked during Follow-Up	7.87	7.22	9.98	* 8.06
Employment Rate at Follow-Up	62.35	47.65	77.57	*** 60.50
Average Weekly Income at Follow-Up	227.96	219.77	210.31	235.98
Welfare Status at Follow-Up Percentage of Terminees on Welfare	29.26	18.18	20.72	*** 29.51
Education Status at Follow-Up Percentage of Terminees Receiving Education	9.59	8.59	10.05	8.51
Client's Average Ratings Program length	2.63	2.67	2.19	2.53
Staff	3.20	3.22	3.17	3.20
Program overall	3.11	3.12	3.05	3.07
Help on job	2.74	2.48	2.52	2.50
Percentage JTPA Assisted to Find Job	28.00	36.92	44.91	33.27
Percentage of Employers Required JTPA Sign up	13.82	14.34	.06	19.69

TABLE 3-20

TITLE IIA AVERAGES/PERCENTAGES BY EMPLOYMENT STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Dependent Variables	Employed	Unemployed	Not in Labor Force
Average Number of Weeks Worked during Follow-Up	9.93	8.23	**** 6.45
Employment Rate at Follow-Up	71.59	61.17	**** 50.03
Average Weekly Income at Follow-Up	219.51	237.99	*** 188.68
Welfare Status at Follow-Up Percentage of Terminees on Welfare	15.71	30.80	**** 43.25
Education Status at Follow-Up Percentage of Terminees Receiving Education	11.85	7.28	**** 12.72
Client's Average Ratings Program length	2.58	2.55	2.45
Staff	3.25	3.18	* 3.04
Program overall	3.21	3.05	** 2.97
Help on job	2.42	2.54	2.38
Percentage JTPA Assisted to Find Job	33.38	36.11	**** 26.52
Percentage of Employers Required JTPA Sign up	20.47	18.87	**** 8.80
Response Rate	88.60	79.78	79.76
Sample Size	307	1939	247

TABLE 3-21

TITLE IIA ADJUSTED MEANS/PERCENTAGE BY EMPLOYMENT STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

13-WEEK FOLLOW-UP

Variables	Employed	Unemployed	Not in Labor Force
Average Number of Weeks Worked during Follow-Up	8.05	7.38	** 8.84
Employment Rate at Follow-Up	63.69	57.34	** 65.34
Average Weekly Income at Follow-Up	216.43	237.89	* 217.93
Welfare Status at Follow-Up Percentage of Terminees on Welfare	22.95	28.32	** 25.38
Education Status at Follow-Up Percentage of Terminees Receiving Education	11.37	10.65	** 7.59
Client's Average Ratings			
Program length	2.53	2.54	2.54
Staff	3.18	3.16	3.24
Program overall	3.00	2.99	3.15
Help on job	2.50	2.56	2.46
Percentage JTPA Assisted to Find Job	29.16	31.64	32.93
Percentage of Employers Required JTPA Sign up	18.65	19.41	17.58

CHAPTER 4

TITLE IIA 26-WEEK FOLLOW-UP

This chapter extends the examination of the labor market experiences of JTP-Ohio participants for a half-year, 26 weeks, immediately after they left their programs. A random sample of respondents who had been interviewed for the 13-week follow-up was selected and contacted again another 13 weeks after their initial interviews. All the procedures used for the original 13-week follow-up were repeated with the 26-week survey, but fewer questions were asked. The questions focused on employment and earnings during week 26, total weeks employed during the period from the first to the second interview, and welfare status at the time of the second interview.

The information obtained from the 26-week interviews was combined with that which had been obtained in the 13-week interviews and with background data on the characteristics of former participants that were available from the Ohio Bureau of Employment Services management information system (MIS). The two interviews and partial MIS data were available for 2084 former participants. As with the 13-week data reported in chapter 3, complete background data were not available for all participants. The adjusted means and percentages, estimates of effects that control for differences in background characteristics and program experiences, were calculated using a subsample of 186 respondents for whom complete MIS data could be matched with the 13-week and 26-week interview information.

The outcomes of major interest in this chapter are changes in welfare status and indicators of employment and earnings during both the follow-up periods. The tables in this chapter present measures of these outcome by the same classification variables used in chapter 3. Percentages are reported of former participants who were welfare recipients at application, at 13-weeks, and at 26 weeks. The following measures of employment experiences are reported for both the 13-week and 26-week follow-up periods: average number of weeks worked, percentage employed when interviewed, and average weekly earning for those who were employed when interviewed. The adjusted means and percentages are presented only the 26-week outcomes. The 13-week measures are used as additional independent variables to explain the 26-week outcomes.

After an overview of all the variables used in the analyses, section two presents age, race, and gender effects. Section three examines effects of JTP-Ohio services and reason for termination from JTP. Section four analyzes effects of several additional variables, including education and welfare status. A summary of the major findings and a discussion of their implications are presented in chapter 7.

A 26-week survey was not conducted for PY 1986 terminations. Consequently, there are no comparisons between PY 1986 and PY 1987 results in this chapter. The discussion of the findings focuses on statistically significant differences among the various classification variables and on findings with policy implications.

Descriptive Data

The means and standard deviations of each variable used in this chapter are shown in table 4-1. Overall, the characteristics and outcomes for the subsample of 13-week respondents who were interviewed for the 26 week follow-up are quite similar. The percentage of males, the age distribution, the percentage with barriers to employment, the percentage who were welfare recipients and unemployed at application, and the reasons for termination are almost the same in the subsample as in the full sample. The subsample, however, had 10 percentage points fewer blacks and 12 percentage points more respondents who had received on-the-job training while participating in JTP Ohio. It was shown in chapter 3 that clients assigned to OJT tended to be more job ready and that OJT was associated with more favorable employment experiences. The slightly higher representation of OJT in the subsample appears to be associated with the subsamples slightly more positive 13-week outcomes. In comparison to the full sample, the outcomes for subsample are 3 percentage points higher on employment at 13 weeks, half a week higher on average weeks worked during the 13-week period, and $11.65 higher on average earnings during the 13th week.

Of more interest than the differences between the full sample and the subsample are the comparisons between the 13-week and the 26-week outcomes. The good news is that welfare status dropped and average weekly earnings increased between the 13th and 26th week and that average weeks worked and percent employed at follow-up changed very little. The 13-week outcomes can be interpreted as indicators of the apparent effects of JTP-Ohio services, and the 26-week results indicate that these effects persist for at least a half year.

The decrease in the number of welfare recipients is perhaps the most significant finding. The percentage of recipients at 26 weeks is half the percentage at application. Other findings presented in this report demonstrate that those who are recipients at application are far more difficult to serve. Nevertheless, half of those who obtained employment upon leaving JTP Ohio remained employed for at least half a year. This evidence suggests that employment and training programs are an effective method of assisting many welfare recipients to become self-supporting.

TABLE 4-1

TITLE IIA MEANS AND STANDARD DEVIATIONS FOR ALL VARIABLES USED IN THE ANALYSES
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variable	Variable Code Name	Mean	Standard Deviation	Number in Category
Percentage Welfare Recipients at Application				
AFDC	AFDCAPL	36.21	48.16	2084
General Relief	GENRLAPL	14.23	34.94	2084
At 13 Weeks	WELFSTA2	28.35	45.18	2039
At 26 Weeks	WELSTA26	24.14	42.83	2076
Average Number of Weeks Worked				
First 13 Weeks	WEEKSWRK	8.46	5.54	2084
Second 13 Weeks	WEELWK26	8.01	5.78	2084
Employment Rates				
At Termination	EMPLTERM	70.43	45.74	2084
At 13 Weeks	EMPLFLUP	62.34	48.56	2084
At 26 Weeks	EMPLFL26	61.92	48.68	2084
Average Weekly Earnings				
At 13 Weeks	PAYWK13	229.28	131.07	1298
At 26 Weeks	PAYWK26	236.00	131.26	1289
Labor Market Experience	LMEXPER	11.05	15.90	1999
Number of Weeks Worked in Year Prior to Application	WKSWRK1	17.89	21.32	1985
Percent Male	SEX	50.52	50.07	2084
Limited English Proficiency	LEP	.76	8.53	2084
Black	BLACK	20.57	40.49	2084
Other Race	OTHRRACE	3.02	17.05	2084
Exceeded Program Duration	TOOLONG	3.36	17.90	2084
Exceeded 90 Day Hold Status	EXHOLD	5.86	23.41	2084
Low Attendance	LOATTEND	6.53	24.69	2084
Ages 30 to 54	AGE3054	54.17	49.81	2084
Ages 55+	AGE55PL	3.88	19.23	2084
Handicapped	HANDICAP	5.19	22.05	217
Dropout	DROPOUT	21.74	41.29	2084
Some College	SMCOL	22.19	41.53	2023
College Graduate	COLGRAD	8.73	28.20	2023
Offender	OFFENDER	5.15	22.14	217
Not in Labor Force	NOTINLF	13.82	32.01	217
Unemployed at Application	UNEMPL	78.37	41.39	217
Job Search	JBSRCH	23.70	42.63	186
Classroom Training	OCC-CLAS	26.34	44.21	186
On the Job Training	OJT	38.29	48.70	186
Single Parent with ≥ 1 child Ages 1 to 6	SP1-6	11.52	32.01	217
Two Parent Home	TWOPAR	32.74	47.00	217
Other Family Member	OTHFAMM	10.19	30.32	217
Single Parent with ≥ 1 children Ages 7 to 17	SP-617	18.48	38.91	217

Age, Race, and Gender

This section analyzes differences on the 13-week and 26-week outcomes by age, race, and gender. As in chapter 3, bivariate differences on the outcomes are shown by age, race, and gender; then a multiway crossbreak showing simultaneous differences on the outcomes by these variables is examined. Next, a multivariate analysis including simultaneous controls for several variables that are likely to influence the outcomes is presented. Finally, the age-race-gender tables are presented separately by welfare status at the time of application.

Table 4-2 shows the bivariate associations between each of the dependent variables and age, race and gender. As in chapter 3, only those differences in average value or percentage across the 3 age categories that are marked with asterisks are statistically significant; the more asterisks, the less likely a difference would be found by chance.[1] All of the relationships found in the 13-week data are replicated in the 26-week results. Age shows a strong association with earnings and welfare status. The curvilinear association between age and earnings, the 30 to 54 year old group earning the most, and the lowest incidence of welfare among the 55 and older are present in both the 13-week and 26-week results.

Race and gender also have the same relationships to the 26-week as to the 13-week outcomes. Blacks and females work less and earn less and both are more likely to receive public assistance, especially at application, than members of other races and males. Despite these intergroup difference, all categories, except those 55 and older, showed decreases in the percentage receiving welfare and increases in average earnings from 13 to 26 weeks.

Table 4-3 shows the simultaneous three-way cross-classification of means/percentages for the outcomes by age, race, and gender. Due to the small number in many of the categories, especially the 55 and older and the other racial category, many of the differences in table 4-2 do not reach statistical significance in 4-3. Nevertheless, most of the primary patterns observed in table 4-2 are present. The curvilinear relationship between age and earnings is not as strong across all categories. Where sample sizes are moderate to large, blacks generally earn less and work less than whites, but the difference in earnings between blacks and whites is much smaller among females than among males. White females earn less than white males in every age category, but this is not so for blacks and those in the other racial category.

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[1] In all tables in this chapter, and in the report, the following signs are used to indicate level of statistical significance: *p $\leq$ .05; **p $\leq$ .01; ***p $\leq$ .001; ****p $\leq$ .0001.

TABLE 4-2

TITLE IIA MEANS/PERCENTAGES BY AGE, BY RACE, AND BY AGE (BIVARIATE)
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Percentage Welfare Recipients								
At Application	54.73	50.72	**** 17.35	46.39	63.61	**** 40.36	42.96	**** 58.76
At 13 Weeks	34.33	31.16	**** 8.89	25.72	44.76	**** 41.33	24.22	**** 38.52
At 26 Weeks	29.46	25.56	**** 11.34	22.84	35.68	**** 29.01	19.29	**** 33.62
Average Number of Weeks Worked								
First 13 Weeks	8.15	8.12	* 6.55	8.57	6.89	**** 7.55	8.60	**** 7.56
Second 13 Weeks	7.66	7.77	* 6.09	8.24	6.28	**** 7.30	8.32	**** 7.02
Employment Rate								
At 13 Weeks	59.39	59.85	*** 48.11	63.58	48.05	**** 62.10	63.67	**** 54.87
At 26 Weeks	58.94	60.10	*** 47.75	63.12	49.75	**** 54.70	64.02	**** 54.39
Average Weekly Earnings								
At 13 Weeks	209.51	236.04	*** 196.81	232.73	194.46	**** 218.92	249.11	**** 195.12
At 26 Weeks	222.27	242.29	*** 182.29	240.91	202.93	**** 239.80	262.79	**** 197.06
Response Size	877	1127	80	1595	427	62	1031	1053

TABLE 4-3

TITLE IIA MEANS/PERCENTAGES BY RACE, GENDER, AND AGE (MULTIVARIATE)
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variables	White						Black						Other					
	Male			Female			Male			Female			Male			Female		
	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+	Age 22-29	Age 30-54	Age 55+
Percentage Welfare Recipients																		
At Application	43.80	38.67	**** 12.01	59.33	53.92	**** 15.98	54.21	63.16	**** 0	72.35	65.54	**** 43.03	38.11	18.53	0	44.34	70.91	* 0
At 13 Weeks	25.14	18.57	**** 11.58	29.01	34.75	**** 6.13	37.09	34.07	** 0	56.34	48.61	**** 15.57	34.95	30.35	0	53.59	53.98	0
At 26 Weeks	25.34	14.04	**** 11.58	27.10	29.51	*** 12.39	20.88	24.45	* 0	47.76	42.58	**** 15.57	14.97	24.81	0	40.36	44.26	0
Average Number of Weeks Worked																		
First 13 Weeks	9.05	9.07	6.84	8.45	7.89	7.60	7.18	7.54	4.33	6.72	6.84	3.84	8.05	8.62	13.00	6.43	6.52	8.00
Second 13 Weeks	8.60	9.17	** 6.09	7.90	7.41	6.66	6.93	6.23	3.57	6.13	6.29	5.05	8.84	8.39	13.00	4.81	6.24	13.00
Employment Rate																		
At 13 Weeks	66.72	69.50	**** 40.04	62.95	56.82	59.82	* 47.99	52.76	28.88	47.62	46.99	43.04	66.61	75.22	100.00	45.71	62.80	0
At 26 Weeks	66.60	69.55	**** 45.08	59.01	58.07	52.70	50.51	53.44	28.88	50.39	48.09	43.04	73.60	59.55	100.00	34.43	41.32	100.00
Average Weekly Earnings																		
At 13 Weeks	237.94	280.39	** 243.82	190.96	200.08	152.96	176.96	209.53	216.86	191.00	195.16	235.11	208.02	213.76	250.00	220.52	237.36	0
At 26 Weeks	249.43	294.92	*** 235.50	207.08	190.91	148.52	199.23	215.93	205.40	195.58	210.22	103.41	231.08	254.55	** 500.00	198.64	245.27	80.00
Response Size	354	473	34	288	413	33	76	77	5	126	137	6	18	15	1	15	12	1

As in chapter 3, table 4-4 present a multivariate analysis that is quite different than the type in table 4-3. Table 4-3 shows relationships between each independent variable (age, race, gender) while controlling for the other two independent variables. This type of presentation makes it is possible to examine an outcome across levels of the three independent variables. Such detail comes at the expense of loss of sample size in each category and difficulty of interpretation.

Each average/percentage in table 3-4, in contrast, is adjusted for an array of control variables. Separate multiple regressions were conducted for each outcome. Each regression equation contained age (using the same three categories as before), race, and gender plus numerous additional controls. The means are adjusted in such a way that their differences always equal the value of a corresponding regression coefficient and their weighted average over all categories of each independent variable equals the overall average (grand mean).

The independent variables included in the regressions are defined in chapter 2. It should be noted again that the complete OBES file was not available for the total 26-week sample. It is only with those clients for whom complete data were available that the multiple regression analyses were run. The characteristics of the subsample are very similar to the full sample and the relationships among the variables are also likely to be similar.

The regression analysis of the 26-week outcomes used the 13-week outcomes as additional independent, control, variables. This enabled a more precise estimate of the effects of the variables of interest, such as welfare status at application, upon the outcomes at 26-weeks. Adding the 13-week outcomes as independent variables substantially increased the proportion of explained variance (R^2) The R^2 for welfare status at 26 weeks, for example, without the 13-week variables is .45. In other words, almost half of the variablility in welfare status 26 weeks after leaving JTP Ohio can be explained in terms of information about the characteristics of the former clients and their experiences in their programs. When the 13-week outcomes are added to the equation as additional control variables, the R^2 increases to .63, or almost two-thirds of the variability being explained.

Table 4-4 shows the effects of entering the 13-week outcomes into the equations. The figures in the table are the adjusted means and percentages with the 13-week variables excluded (out) or included (in) as control variables in the equations. The most common effect of including the 13-week is to reduce the differences among the categories by adjusting the values to be closer to the overall values for the 26-week outcomes. The largest change occurs for the average earnings at 26-weeks. With the 13-week outcomes excluded, the range in earnings across the age categories is from $219.68 to $304.00. With the 13-week outcomes included, this range decreases to $240.41 to $288.20. The range decreased by almost half. The inclusion of the 13-week outcomes, however,

TABLE 4-4
TITLE IIA ADJUSTED MEANS/PERCENTAGES BY AGE, BY RACE, AND BY GENDER
13-WEEK OUTCOMES EXCLUDED (OUT) OR INCLUDED (IN) AS CONTROL VARIABLES
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Percentage Welfare Recipients at 26 Weeks								
13-weeks out	27.94	23.10	22.91	23.07	27.31	53.51	22.91	27.71
13-weeks in	26.55	23.96	27.15	25.66	21.04	46.81	21.72	29.15
Average Number of Weeks Worked Second 13 Weeks								
13-weeks out	8.00	7.55	10.30	8.29	6.92	5.78	7.62	8.11
13-weeks in	8.10	7.46	10.43	7.95	7.77	6.48	7.68	8.05
Employment Rate at 26 Weeks								
13-weeks out	63.37	55.27	57.24	62.70	51.67	34.12	56.39	61.69
13-weeks in	64.38	54.49	56.26	60.03	58.61	37.38	56.24	61.86
Average Weekly Earnings at 26 Weeks								
13-weeks out	219.68	304.00	** 268.01	273.82	269.23	76.48	334.75	**** 188.08
13-weeks in	240.41	288.20	* 247.92	272.01	265.92	138.30	312.86	*** 212.76

does not change the basic patterns observed when these outcomes are excluded. All the remaining adjusted means and percentages in this chapter were calculated with the 13-week outcomes included as independent variables.

In general the control variables that produced the results in table 4-4 tend to minimize the differences among the age, race and gender categories shown in the preceding tables. Despite the use of these controls, workers in the middle age range and males were still found to earn more than younger and older workers and females. All the other differences in welfare status, weeks worked, employment rates at follow-up, and earnings across categories found in earlier tables were not obtained when the full set of control variables were used.

Controlling welfare status at application eliminated the statistically significant differences in percentage of welfare recipients at 13 and 26 weeks found across the age, race, and gender categories in table 4-2. The differences are in the same direction as in table 4-2 but not large enough or based on sufficient number of cases to be significant. The additional controls actually reversed the direction of the gender differences in employment rates and average weeks worked during the second 13 weeks that were shown in table 4-2, but the differences are not statistically significant.

Table 4-5 displays the relationships between each outcome and age, race, and gender separately for those who were receiving public assistance and those who were not receiving public assistance at the time of application. It can be seen that while participation in JTP Ohio was associated with dramatic drops in welfare status, some former clients who were not welfare recipients at application were recipients at follow-up. Fortunately, the number who stated receiving welfare is less than one-sixth of the number who stopped receiving it. These results suggest that of every 100 welfare recipients served by JTP Ohio, over 60 will be off welfare for at least a half year after leaving their programs. Of every 100 served who were not recipients at application, less than 10 will be on welfare a half year after termination. All of the more favorable labor market outcomes found at 13 weeks for those who were not welfare recipients at application were found to persist to 26 weeks.

Table 4-6 presents the simultaneous cross-tabulations of means/percentages on the outcomes by welfare status at application, age, race, and gender. Sample sizes here often are too small to allow firm conclusions, but the main patterns observed in table 4-3 also show up in table 4-6[2].

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[2] Statistical tests of all the possible relationships are not reported because there are too many of them to tabulate conveniently.

TABLE 4-5

TITLE IIA MEANS/PERCENTAGES FOR WELFARE RECIPIENTS AND FOR NONWELFARE RECIPIENTS BY AGE, BY RACE, AND BY GENDER
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Percentage Welfare Recipients								
At Application	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
At 13 Weeks	53.63	51.39	43.91	46.19	62.37	**** 65.03	44.24	**** 57.85
At 26 Weeks	47.21	41.65	** 43.91	40.70	50.27	**** 47.68	36.30	**** 49.73
Average Number of Weeks Worked								
First 13 Weeks	6.97	7.08	4.11	7.43	6.20	** 6.99	7.55	* 6.60
Second 13 Weeks	6.26	6.57	6.54	7.02	5.32	**** 7.19	7.05	** 5.99
Employment Rate								
At 13 Weeks	48.20	52.39	*** 28.24	54.95	41.11	**** 57.17	54.81	**** 46.91
At 26 Weeks	47.18	50.04	50.68	53.01	40.86	**** 53.04	52.90	**** 45.86
Average Weekly Earnings								
At 13 Weeks	196.09	217.30	** 65.09	214.65	186.95	222.28	232.44	**** 186.03
At 26 Weeks	201.30	216.23	** 84.70	215.05	188.60	* 233.86	235.43	**** 185.48
Response Size	471	552	10	732	275	26	440	593

Table 4-5--Continued

Not Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Percentage Welfare Recipients								
At Application	0	0	0	0	0	0	0	0
At 13 Weeks	10.64	10.34	**** 1.46	7.87	13.80	**** 26.81	9.16	10.70
At 26 Weeks	8.12	8.99	4.50	7.31	10.50	**** 16.39	6.46	**** 10.81
Average Number of Weeks Worked								
First 13 Weeks	9.56	9.19	*** 7.07	9.55	8.11	*** 7.93	9.38	8.92
Second 13 Weeks	9.36	9.01	**** 6.00	9.29	7.96	** 7.37	9.28	* 8.48
Employment Rate								
At 13 Weeks	72.91	67.55	**** 52.28	71.05	60.18	**** 65.43	70.35	66.20
At 26 Weeks	73.16	70.46	**** 47.13	71.87	65.29	**** 55.83	72.40	66.54
Average Weekly Earnings								
At 13 Weeks	220.23	251.00	** 211.75	244.82	203.42	** 216.93	258.89	**** 204.29
At 26 Weeks	238.62	261.37	* 204.32	257.42	218.61	** 243.62	277.86	**** 208.43
Response Size	406	575	70	863	152	36	613	438

TABLE 4-6

TITLE IIA MEANS/PERCENTAGES BY GENDER, RACE, AGE: AND BY WELFARE STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Females: Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Percentage Welfare Recipients									
At Application	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	0
At 13 Weeks	45.73	54.02	37.54	69.11	68.51	36.17	65.59	72.97	0
At 26 Weeks	41.05	45.97	37.54	59.62	57.78	36.17	55.09	54.66	0
Average Number of Weeks Worked									
First 13 Weeks	7.22	7.08	9.60	6.08	5.83	0	5.02	6.74	0
Second 13 Weeks	6.61	6.51	6.06	5.15	5.13	8.30	5.31	5.92	0
Employment Rate									
At 13 Weeks	50.71	52.42	77.66	42.47	37.77	0	34.41	69.63	0
At 26 Weeks	49.19	51.54	47.59	42.28	35.71	63.83	44.91	39.35	0
Average Weekly Earnings									
At 13 Weeks	186.85	194.56	65.09	171.14	181.59	0	253.65	236.51	0
At 26 Weeks	200.04	181.79	66.34	187.62	177.12	60.00	216.03	261.50	0
Response Size	172	216	5	89	94	2	7	8	0

Table 4-6--Continued

Females: Not Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Percentage Welfare Recipients									
At Application	0	0	0	0	0	0	0	0	0
At 13 Weeks	4.46	11.91	0	21.99	10.24	0	44.03	18.92	0
At 26 Weeks	6.74	10.26	7.60	17.36	13.89	0	28.63	18.92	0
Average Number of Weeks Worked									
First 13 Weeks	10.26	8.85	7.22	8.42	8.75	6.74	7.55	6.00	8.00
Second 13 Weeks	9.76	8.47	6.78	8.69	8.44	2.60	4.40	7.04	13.00
Employment Rate									
At 13 Weeks	80.82	61.99	56.43	61.12	64.52	75.55	54.71	46.12	0
At 26 Weeks	73.35	65.72	53.67	71.61	71.62	27.33	26.08	46.12	100.00
Average Weekly Earnings									
At 13 Weeks	194.71	205.54	175.95	227.12	210.26	235.11	203.93	240.50	0
At 26 Weeks	213.97	199.28	162.37	207.89	241.63	180.00	174.80	211.50	80.00
Response Size	116	197	28	37	43	4	8	4	1

Table 4-6--Continued

Males: Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Percentage Welfare Recipients									
At Application	100.00	100.00	100.00	100.00	100.00	0	100.00	100.00	0
At 13 Weeks	45.21	37.26	67.07	60.13	41.81	0	62.96	48.67	0
At 26 Weeks	48.71	26.67	67.07	35.11	33.60	0	39.28	26.30	0
Average Number of Weeks Worked									
First 13 Weeks	7.52	8.03	2.63	6.81	7.15	0	8.95	8.24	0
Second 13 Weeks	6.88	8.23	4.28	5.71	5.37	0	10.26	8.46	0
Employment Rate									
At 13 Weeks	53.70	63.46	0	40.43	49.63	0	60.60	73.70	0
At 26 Weeks	50.98	60.67	32.93	39.11	47.87	0	78.92	51.33	0
Average Weekly Earnings									
At 13 Weeks	223.25	255.50	0	188.70	218.16	0	183.38	222.29	0
At 26 Weeks	207.69	270.33	208.00	207.57	209.03	0	222.72	256.56	0
Response Size	155	181	3	41	49	0	7	4	0

Table 4-6--Continued

Males: Not Welfare Recipients

Variables	White			Black			Other		
	Age			Age			Age		
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Percentage Welfare Recipients									
At Application	0	0	0	0	0	0	0	0	0
At 13 Weeks	9.03	6.97	4.01	10.17	20.95	0	19.79	25.93	0
At 26 Weeks	7.13	5.96	4.01	4.03	9.29	0	0	24.47	0
Average Number of Weeks Worked									
First 13 Weeks	10.23	9.73	7.41	7.63	8.23	4.33	7.49	8.70	13.00
Second 13 Weeks	9.94	9.77	6.33	8.38	7.70	3.37	7.96	8.37	13.00
Employment Rate									
At 13 Weeks	76.87	73.32	45.91	56.94	58.12	28.88	70.31	75.57	100.00
At 26 Weeks	78.77	75.15	46.73	64.00	62.99	28.88	70.31	61.42	100.00
Average Weekly Earnings									
At 13 Weeks	245.94	293.97	243.82	167.09	196.89	216.86	221.10	211.87	250.00
At 26 Weeks	270.48	307.44	238.15	193.20	224.92	205.40	236.86	254.17	500.00
Response Size	199	292	31	35	28	5	11	11	1

Table 4-7 shows adjusted means and percentages by age, by race, and by gender separately for those on public assistance at application and those not on public assistance. Welfare status at application was used to sort the respondents into two groups and separate regressions were run for each group using the same procedures, with 13-week outcomes included as independent variables, as were used for table 4-4. Among those who were not welfare recipients at application, females were more likely than males to be recipients at the 26-week follow-up. Males earned considerably more than females in both the welfare and nonwelfare at application groups. Somewhat surprisingly, nonwelfare recipients in the 30 to 54 age group worked less than younger workers during the second follow-up period. The aberrant findings for those 55 and older who were welfare recipients at application are based on very few cases.

JTP Ohio Services and Reasons for Termination

A primary goal of the analysis is to determine the impacts of services and reason for termination on the 26-week outcome variables. As in chapter 3, services received by JTP-Ohio clients were classified into three types--occupational classroom training, OJT, and job search assistance. Reasons for termination were classified into five categories: (1) entered employment, (2) exceeded program duration limits (C12), (3) exceeded 90-day hold limit (C14), (4) poor attendance (C06, C07), and (5) other.

The general model for conducting these analyses was presented in chapter 3 as figure 3-1. That model assumed that services and reason for termination are sequential rather than simultaneous. To observe the total effects of services, one must exclude control for reason for termination. To observe the direct effect of services, control for reason for termination must be added. When reason for termination is in the equation, it explains all variability in the outcomes that is uniquely associated with it. Thus the estimates of the total effects of JTP services are reduced to the degree these effects are due to reason for termination.

Table 4-8 shows the bivariate relationships between each of the outcomes and type of service--the basic relationships without any controls--as well as the adjusted means and percentages. The uncontrolled results show that clients who received OJT are significantly more positive on almost all the outcome variables. Classroom instruction is associated with lower average earnings at 26 weeks, and job search is associated with lower employment rate at 13 weeks.

The lower part of table 4-8 presents the adjusted means/percentages first under control for all independent variables except reason for termination (Tot Eff), then for all the factors used as controls in previous tables including reason for termination (Dir Eff). When these controls are added, all the statistically significant differences are eliminated.

TABLE 4-7

TITLE IIA ADJUSTED MEANS/PERCENTAGES FOR WELFARE RECIPIENTS AND NONWELFARE RECIPIENTS BY AGE, BY RACE, AND BY GENDER

26-WEEK FOLLOW-UP

Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Percentage Welfare Recipients at 26 Weeks	51.33	45.26	19.02	47.50	46.81	56.88	48.39	47.48
Average Number of Weeks Worked Second 13 Weeks	5.89	6.54	* 13.00	6.69	5.85	6.51	6.65	6.23
Employment Rate at 26 Weeks	45.64	48.90	* 100.00	53.44	41.43	41.99	48.68	48.50
Average Weekly Earnings at 26 Weeks	207.30	229.08	* -	203.29	227.77	203.29	284.25	* 168.44

Not Welfare Recipients at Application

Variables	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Percentage Welfare Recipients at 26 Weeks	3.23	11.54	6.63	8.89	2.56	24.86	2.66	* 17.48
Average Number of Weeks Worked Second 13 Weeks	10.00	7.92	* 11.01	8.84	8.99	11.74	8.72	9.28
Employment Rate at 26 Weeks	79.03	58.63	* 50.92	64.71	70.16	100.00	62.11	74.10
Average Weekly Earnings at 26 Weeks	277.88	306.25	299.81	298.56	285.97	198.80	324.18	* 241.16

TABLE 4-8

TITLE IIA AVERAGES/PERCENTAGES BY TYPE OF SERVICE
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Dependent Variables	Classroom Instruction		Job Search		OJT	
	Yes	No	Yes	No	Yes	No
Percentage Welfare Recipients						
At Application	56.24	48.70	57.72	48.40	36.38	**** 58.24
At 13 Weeks	44.04	35.94	44.96	35.99	20.97	**** 45.51
At 26 Weeks	26.92	24.00	25.34	24.61	15.25	**** 29.98
Average Number of Weeks Worked						
First 13 Weeks	6.52	8.03	7.24	7.75	10.14	**** 6.30
Second 13 Weeks	7.71	8.11	7.61	8.13	9.96	*** 6.97
Employment Rate						
At 13 Weeks	51.87	58.95	49.06	* 59.70	77.83	**** 46.15
At 26 Weeks	61.19	59.46	60.71	59.66	69.04	** 55.12
Average Weekly Earnings						
At 13 Weeks	258.56	264.26	218.65	274.86	286.93	241.55
At 26 Weeks	199.42	** 275.71	226.31	264.59	308.33	*** 219.84
Response Size	49	137	44	142	71	115

ADJUSTED MEANS/PERCENTAGES

Percentage Welfare Recipients at 26 Weeks						
Tot Eff	23.85	25.65	24.91	25.32	28.02	23.77
Dir Eff	26.28	24.86	23.37	25.85	29.12	23.20
Average Number of Weeks Worked Second 13 Weeks						
Tot Eff	8.59	7.61	8.68	7.56	8.59	7.47
Dir Eff	8.52	7.63	8.88	7.49	8.57	7.48
Employment Rate at 26 Weeks						
Tot Eff	63.79	57.28	65.40	56.62	60.90	57.85
Dir Eff	63.95	57.22	67.40	55.93	61.69	57.44
Average Weekly Earnings at 26 Weeks						
Tot Eff	218.12	281.40	249.38	271.50	263.92	266.78
Dir Eff	220.66	280.56	248.50	271.81	264.25	266.61

Reason for termination is not as powerful a mediating factor between services and 26-week outcomes as it is for 13-week outcomes. A substantial part of the total effect of OJT on weeks worked and employment at 13 weeks is reflected in employment at termination. When the 13-week outcomes are included in the regression as independent variables, they account for much of the effect of reason for termination and little of this effect is uniquely related to the 26-week outcomes.

It should not be inferred from this explanation that reason for termination does not have a strong association with the 26-week outcomes. Table 4-9 shows that it clearly does. In the regression equations, however, this association is shown to operate through the 13-week outcomes, not independently.

Predetermined Variables

In this section five independent variables are examined: employment status, welfare status, family structure, barriers to employment, and employment status. Considerable previous research has demonstrated that these variables are likely to influence employment outcomes. All of these characteristics were measured at the time of application, except education status which was obtained from the follow-up survey. These variables were included as controls in the regressions already presented; this section examines their specific effects. For each relationship, except barriers to employment, bivariate mean and percentages differences are presented as a basis of comparison and adjusted means are shown to assess net impacts of the independent variables on the outcomes. Regressions were not calculated for barriers to employment because there were so few cases in each category of barrier. The independent variables included here and procedures for calculating adjusted means are the same as those used previously. Tables 4-10 to 4-14 show the results.

In the uncontrolled comparisons education has the expected impact with most of the differences across the educational levels in the expected direction: more education is associated with more positive outcomes. In the adjusted means/percentages, however, none of the differences across levels is significant and the direction of some of the differences is reversed. This is the general pattern in each of the tables in this section. In the bivariate tables the following relationships were found:

- o Those who were welfare recipients at application work less, earn less and are much more likely to be recipients at follow-up than those who were not recipients at application (table 4-11).
- o Single parents work less, earn less and are more likely to receive welfare than those in other family structures (table 4-12).

- The effects of barriers to employment (ex-offender, handicapped, limited English proficiency) are smaller and not always in the direction one might expect (table 4-13).
- Those who were employed at application were employed more at the 26-week follow-up and worked more weeks during the follow-up period than those who were unemployed or out of the labor force (table 4-14).

When the adjusted means and percentages were calculated, however, most of these statistically significant differences were not found. The subsample for whom the complete data were available yielded so few cases across the various categories that the regression coefficients for these categories usually failed to reach significance.

A summary of the major findings from this and the other chapters and a discussion of their implications are presented in chapter 7.

TABLE 4-11

TITLE IIA AVERAGES/PERCENTAGES BY WELFARE STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variables	AFDC Recipient	General	Nonwelfare
Percentage Welfare Recipients			
At Application	100.00	100.00	**** 0.00
At 13 Weeks	52.84	51.03	**** 9.83
At 26 Weeks	45.85	40.31	**** 8.34
Average Number of Weeks Worked			
First 13 Weeks	7.08	6.78	**** 9.19
Second 13 Weeks	6.56	6.12	8.94
Employment Rate			
At 13 Weeks	51.01	48.20	**** 68.56
At 26 Weeks	49.55	46.94	**** 69.88
Average Weekly Earnings			
At 13 Weeks	215.04	187.02	**** 236.23
At 26 Weeks	210.69	200.76	**** 249.44
Response Size	737	296	1051

ADJUSTED MEANS/PERCENTAGES

Percentage Welfare Recipients at 26 Weeks	30.44	33.19	20.85
Average Number of Weeks Worked Second 13 Weeks	6.82	9.61	8.20
Employment Rate at 26 Weeks	47.01	84.65	62.05
Average Weekly Earnings at 26 Weeks	250.09	235.59	279.87

TABLE 4-12

TITLE IIA AVERAGES/PERCENTAGES BY FAMILY STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variables	Single Parent w/≥ 1 Child under 6yrs.	Single Parent with ≥ 1 Child 7-17 yrs.	Parent in 2 Parent Home	Other Family Member	Non-Dependent
Percentage Welfare Recipients					
At Application	86.03	73.12	51.31	24.94	**** 34.96
At 13 Weeks	59.45	45.93	36.34	34.66	**** 24.10
At 26 Weeks	54.22	36.85	30.83	7.70	**** 10.19
Average Number of Weeks Worked					
First 13 Weeks	5.28	6.79	8.00	9.89	* 8.78
Second 13 Weeks	5.42	7.68	8.38	9.77	* 7.90
Employment Rate					
At 13 Weeks	36.03	53.48	62.65	71.15	**** 59.67
At 26 Weeks	41.56	52.80	62.75	71.17	*** 59.12
Average Weekly Earnings					
At 13 Weeks	206.77	234.51	312.73	311.98	* 205.84
At 26 Weeks	193.70	210.89	300.53	329.82	* 209.05
Response Size	25	40	71	22	59

ADJUSTED MEANS/PERCENTAGES

Percentage Welfare Recipients at 26 Weeks	28.34	30.29	29.54	25.78	16.17
Average Number of Weeks Worked Second 13 Weeks	8.21	9.10	8.48	7.07	* 6.55
Employment Rate at 26 Weeks	68.97	63.83	64.98	53.73	47.32
Average Weekly Earnings at 26 Weeks	350.81	296.00	229.12	256.49	* 250.85

TABLE 4-13

TITLE IIA AVERAGES/PERCENTAGES BY BARRIERS TO EMPLOYMENT AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variables	Offender	Handicapped	Limited English	No Barrier
Percentage Welfare Recipients				
At Application	62.64	31.47	44.30	* 54.47
At 13 Weeks	24.40	11.00	15.00	**** 40.87
At 26 Weeks	29.86	13.68	13.69	28.03
Average Number of Weeks Worked				
First 13 Weeks	7.46	3.99	9.04	8.12
Second 13 Weeks	7.00	4.87	7.68	8.07
Employment Rate				
At 13 Weeks	54.76	26.31	66.45	**** 59.69
At 26 Weeks	48.15	31.56	55.77	59.87
Average Weekly Earnings				
At 13 Weeks	301.46	304.92	223.64	250.62
At 26 Weeks	298.22	301.29	323.31	243.51
Response Size	10	11	15	194

NOTE: Adjusted means not calculated because of small numbers in each category of barriers to employment.

TABLE 4-14

TITLE IIA ADJUSTED MEANS/PERCENTAGE BY EMPLOYMENT STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

26-WEEK FOLLOW-UP

Variables	Employed	Unemployed	Not in Labor Force
Percentage Welfare Recipients			
At Application	27.55	53.45	*** 86.88
At 13 Weeks	26.96	37.13	60.06
At 26 Weeks	7.53	30.23	32.75
Average Number of Weeks Worked			
First 13 Weeks	9.50	7.58	7.04
Second 13 Weeks	11.19	7.24	** 7.55
Employment Rate			
At 13 Weeks	73.25	55.24	** 48.89
At 26 Weeks	80.03	53.77	*** 55.68
Average Weekly Earnings			
At 13 Weeks	240.85	266.08	201.49
At 26 Weeks	251.31	259.04	* 173.28
Response Size	30	170	17

ADJUSTED MEANS/PERCENTAGES

Percentage Welfare Recipients at 26 Weeks	8.11	23.94	* 15.12
Average Number of Weeks Worked Second 13 Weeks	9.23	8.17	8.38
Employment Rate at 26 Weeks	70.24	62.02	62.62
Average Weekly Earnings at 26 Weeks	228.18	211.22	310.52

CHAPTER 5

TITLE III 13-WEEK FOLLOW-UP

Title III of the Job Training Partnership Act (JTPA) is directed to dislocated workers who are unlikely to return to their previous industry or occupation. Unlike title IIA, these clients do not have to be economically disadvantaged to qualify for JTP-Ohio services. The procedures used to follow up the title III clients were identical to those used with the title IIA survey, and information was collected on the same eleven outcomes reported in chapter 3:

- Weeks worked during the 13-week follow-up period
- Employment status (employed, not employed) during week 13 of the follow-up period
- Earnings during week 13 of the follow-up period (for those who worked)
- Welfare recipient (yes, no) during week 13
- Education status during the 13-week follow-up (attended school during period, did not attend)
- Clients' ratings of satisfaction with training or services received while participating in JTP-Ohio
  - Length of program (3-point scale)
  - Instructors or other staff (4-point scale)
  - Program overall (4-point scale)
  - Helpfulness of training or services on the job (4-point scale)
- Percentage assisted to find job by JTPA
- Percentage whose employers required them to sign up for JTPA to get job

This chapter presents analyses that examine the relationships between these outcomes and several measures of the characteristics of title III clients and of the services they received while participants in JTP Ohio that could influence these outcomes. Basic cross-tabulations, paralleling those presented in chapter 3, are examined[1]. Multivariate analyses of these same data were conducted but are not reported in detail because the complete background information necessary for these analysis was available for only one-fifth of the respondents. Many of the title III clients interviewed for the follow-up had been selected from lists supplied by contracted providers of services. These lists contain only basic information on the characteristics of clients.

Descriptive Data

Table 5-1 contains the mean, the standard deviation, and the number of cases for each variable used in this report. The maximum number of usable interviews is 357, but data were available for all former clients for only 5 of the variables in the table. Data were available for almost all clients for an additional 11 variables but then the number of usable cases drops sharply. The variables for which there is the least usable information are the ones that are critical to the multivariate analysis, those indicating the type of services received while in JTP-Ohio programs.

As in the PY 1986 survey, the title III clients are different on many characteristics from the title IIA clients. Over 70 percent of the title IIIs are males, while the title IIAs divide evenly male and female. Just 6 percent of the title IIIs were welfare recipients at application compared to over 50 percent of the title IIAs. Almost two-thirds of the title IIIs were parents in families where both parents were present compared to one-fourth of the title IIAs. The comparison that most clearly reflects the difference in the attractiveness of these clients to employers is their earnings at follow-up: the title IIIs who were employed were earning an average of $363 per week, while the title IIAs earned only $218.

The percentage of title III clients employed at termination was a little higher in PY 1987 than in PY 1986 and the percentage employed at follow-up was almost identical. Surprisingly the percentage employed at termination--the most direct indicator of

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[1] All statewide statistical summaries contained in this chapter were calculated using sample weights. Sample weights were used to correct for the difference in response rates between those employed and those not employed at termination. The weights are designed to prevent persons employed at termination from being over-represented in the calculations. The formula used to calculate the weight is Pj/pj for those employed at termination and (1-Pj)/(1-pj) for those not employed. Pj stands for the proportion employed at termination in the population, and pj is corresponding proportion for completers.

TABLE 5-1

TITLE III MEANS AND STANDARD DEVIATIONS
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

Variable	Variable Code Name	Mean	Standard Deviation	Sample Size
Employed at Termination	EMPLTERM	71.19	45.35	354
Employed at Follow-Up	EMPLFLUP	72.82	44.55	357
Average Pay in Week 13	PAYWK13	363.02	212.56	260
Average Number of Weeks Worked	WEEKSWRK	9.51	4.94	357
Welfare Status at Follow-up	WELSTA2	6.90	25.38	348
Education Status at Follow-Up	ATNDSCHL	2.82	16.59	354
Client Average Ratings				
Program Length	LENGTRNG	2.40	.90	293
Staff	RATEINST	3.67	.71	302
Program Overall	RATEPROG	3.15	.80	299
Help on Job	TRNHELP	2.42	1.28	289
JTPA Assisted to Find Job	JTPAASST	22.40	41.82	294
Employer Required JTPA Signup	EMPLREQ	8.83	28.32	285
Labor Market Experience	LMEXPER	17.62	13.79	342
Number of Weeks Worked in Year Prior to Application	WKSWRK1	29.55	22.17	343
Percentage Male	SEX	71.71	45.10	357
Black	BLACK	14.04	34.79	356
Other Race	OTHRRACE	3.09	17.33	356
AFDC Recipient at Application	AFDCAPL	4.67	21.16	214
General Recipient at Application	GENRLAPL	1.40	11.78	214
Exceeded Program Duration	TOOLONG	3.67	18.83	354
Exceeded 90 Day Hold Status	EXHOLD	.56	7.51	354
Age 30 to 54	AGE3054	71.43	45.24	357
Age 55+	AGE55PL	9.24	29.00	357
High School Dropout	DROPOUT	14.29	35.04	357
Some College	SMCOL	33.43	47.24	344
College Graduate	COLGRAD	9.88	29.89	344
Job Search	JBSRCH	30.34	46.27	76
Classroom Training	OCC-CLAS	50.00	50.32	76
On the Job Training	OJT	11.86	32.48	76
Assessment	ASSESS	7.89	27.12	76
Single Parent with ≥ 1 Child Ages 1 to 6	SP1-6	1.28	0	78
Two-Parent Home	TWOPAR	62.82	41.67	78
Other Family Member	OTHFAMM	16.67	23.59	78
Single Parent with ≥ 1 Child Ages 7 to 17	SP6-17	1.28	0	78

the effect of JTP-Ohio services--is only slightly higher for title IIIs than for title IIAs (71.19 compared to 67.94 percent). Title IIAs, however, were much more likely than title IIIs to report JTPA assisted then to find their jobs (36.54 compared to 22.40 percent).

Basic Cross-Tabulations

This section reviews basic cross-tabulations showing the relationships between the outcomes and several independent variables. With one exception, these are bivariate relationships and therefore are not indicators of net effects. Table 5-3 does present simultaneous three-way cross classifications by age, race, and gender. Since no other variables affect race, age, and gender, the results in table 5-3 could be viewed as rough estimates of total effects, except that the entries in many of its cells are based on very few respondents.

Table 5-2 reports the separate bivariate relationships between race, gender, and age and the eleven outcomes; the simultaneous cross-classifications, as noted above, are presented in table 5-3. In general, there are fewer statistically significant differences across the categories than in the title IIA results.[2] In part this is due to the smaller number of respondents upon which the results are based, but it also seems to reflect the more positive labor market experiences of these clients. The differences that are significant are consistent with other results in this report and with other research on the effects of age, sex, and race. Males earn more than females, and workers in the middle age range earn more than younger and older workers. Blacks work fewer weeks, are less likely to be employed when contacted at follow-up, and are more likely to receive public assistance than are whites.

On most of the outcome variables the differences across the title III groups are less than in the title IIA results. On average earnings, however, the title III differences across categories are more pronounced. In the title IIA data, females earn $70 less per week; in the title III data the difference is double, $140. Title III clients in the middle age range earn $90 more

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[2] In all tables in this chapter and in the report the following signs are used to indicate level of statistical significance:
$^*p \leq .05$; $^{**}p \leq .01$; $^{***}p \leq .001$; $^{****}p \leq .0001$.
Sample sizes in the tables are number drawn for the sample, not the number of completed interviews. To find the number of completed interviews, multiply the sample size by the response rate converted to a proportion. For example in table 5-2, the response rate for respondents 22-29 years of age was 73.40%. The sample size is .7340 times 94 or 69.

TABLE 5-2

TITLE III MEANS/PERCENTAGES BY AGE, BY RACE, AND BY GENDER:
BIVARIATE RELATIONSHIPS
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

	Age			Race			Gender	
	22-29	30-54	55+	White	Black	Other	Male	Female
Average Number of Weeks Worked During Follow-Up	10.05	9.39	8.49	9.68	7.75	** 9.83	9.71	8.71
Employment Rate at Follow-Up	75.23	72.24	65.83	74.96	57.40	** 62.38	73.78	68.14
Average Weekly Earnings at Follow-Up	311.79	391.05	*** 224.19	370.11	311.12	314.27	398.48	**** 258.42
Welfare Status at Follow-Up, Percentage of Individuals on Welfare at Follow-Up	6.61	7.68	2.91	5.57	15.38	* 9.67	5.98	9.67
Education Status at Follow-Up, Percentage of Individuals Receiving Education at Follow-Up	1.47	3.10	3.01	3.03	2.01	0.00	2.73	2.92
Client's Average Ratings								
Program length	2.50	2.38	2.32	2.37	2.52	2.60	2.43	2.31
Staff	3.37	3.39	3.28	3.41	3.22	3.19	3.41	3.33
Program overall	3.14	3.16	3.12	3.18	3.13	2.67	3.18	3.10
Help on job	2.53	2.38	2.36	2.38	2.63	2.17	2.37	2.52
Percentage JTPA Assisted to Find Job	30.81	20.43	17.83	21.30	27.01	29.76	19.79	29.57
Percentage of Employers Required JTPA Sign up	10.47	8.04	10.81	8.88	2.75	* 28.59	9.16	7.59
Response Rate	73.40	79.19	73.33	80.00	79.36	73.33	78.53	82.79
Sample Size	94	322	45	369	63	15	326	122

TABLE 5-3

TITLE III MEANS/PERCENTAGES BY RACE, GENDER, AND AGE:
MULTIVARIATE CROSS-CLASSIFICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

	White						Black						Other					
	Male			Female			Male			Female			Male			Female		
	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age	Age
	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+	22-29	30-54	55+
Average Number of Weeks Worked During Follow-Up	9.93	9.81	10.07	10.08	9.20	7.25	9.02	8.19	10.35	10.42	6.41	1.00	13.00	8.45	6.00	13.00	13.00	13.00
Employment Rate at Follow-Up	72.37	76.09	77.55	85.22	73.58	48.54	59.53	61.21	100.00	58.83	41.68	34.60	100.00	49.02	0	100.00	100.00	100.00
Average Weekly Earnings at Follow-Up	366.07	437.11	*** 206.67	251.64	245.07	281.30	150.79	360.83	313.51	315.00	336.90	134.00	225.00	470.15	0	146.00	270.00	150.00
Welfare Status at Follow-Up, Percentage of Individuals on Welfare at Follow-up	0	6.51	0	8.40	8.90	0	26.45	13.49	0	25.36	7.49	30.79	0	17.63	0	0	0	0
Education Status at Follow-Up, Percentage of Individuals Receiving Education at Follow-up	0	2.98	5.44	6.96	3.99	0	0	5.97	0	0	0	0	0	0	0	0	0	0
Client's Average Ratings Program length	2.70	2.36	2.33	1.78	2.42	1.98	2.38	2.67	3.00	3.00	2.22	2.31	3.00	2.19	3.00	3.00	3.00	3.00
Staff	3.38	3.46	3.34	3.50	3.26	3.28	3.00	3.34	3.00	3.42	3.16	2.96	2.00	3.36	3.00	4.00	2.00	4.00
Program overall	3.21	3.18	3.17	3.22	3.08	3.42	3.00	3.21	3.00	3.10	3.21	2.62	2.00	3.24	3.00	2.00	2.00	2.00
Help on job	2.40	2.29	2.57	3.00	2.44	2.37	2.76	2.67	2.41	2.24	3.25	1.00	4.00	2.14	3.00	1.00	2.00	1.00
Percentage JTPA Assisted to Find Job	23.74	15.89	23.19	63.33	29.74	* 0	23.54	40.42	0	13.80	33.33	0	100.00	19.06	100.00	0	0	0
Percentage of Employers Required JTPA Sign up	6.29	8.43	18.46	16.33	7.25	0	23.54	0	0	0	0	0	100.00	19.06	0	0	100.00	0
Response Rate	72.55	80.86	78.26	83.33	80.00	100.00	100.00	72.73	66.67	90.91	73.68	100.00	33.33	75.00	100.00	100.00	100.00	100.00
Sample Size	51	209	23	18	60	8	5	22	3	11	19	3	3	8	1	1	1	1

than younger workers and $167 more than older workers. In the title IIA data the maximum difference across age groups is $43. The racial differences in earnings are also larger in the title III than in the IIA results, but the title III differences do not reach statistical significance. These large differences in earnings among the title III clients suggest employers are paying for the prior work experience of the dislocated workers. Males, whites, and prime age workers tend to have had their previous experience in higher paying jobs and this appears to influence the earnings they receive after leaving JTP-Ohio.

There are no significant differences across groups in tables 5-2 and 5-3 in satisfaction ratings of training or services received from JTP-Ohio, and only two significant difference in the percentage assisted by JTPA to find their jobs. Young, white females and individuals in the "other" racial group were significantly more likely to report receiving such assistance, but both of these results are based on small numbers of respondents.

Table 5-4 reports bivariate associations between the five outcomes and four types of JTP services. In the title IIA report, only three types of services were analyzed--classroom training, job search, and OJT. These are the three most common types of services for title IIA participants. In the PY 1986 survey, assessment was included in the analysis of the title III data because it was found to be associated with higher rates of employment and much higher average earnings. The higher employment rates were found in the current survey but the earnings advantage was not. All of the results in table 5-4, however, must be interpreted cautiously because they are based only on those respondents for whom complete background information was available and the number that received assessment and OJT in this group are quite low.

The relationships between the outcome variables and reasons for termination are shown in table 5-5. These results are based on all respondents and more confidence can be placed in them than those in table 5-4. Clients who entered employment clearly do better than those who left JTP for any other reason. They work more during the 13-week follow-up, are much more likely to be employed during the 13th week, earn more if they are employed, and are less likely to be on welfare. All these differences are statistically significant and consistent with the PY 1986 and the title IIA results. Leaving JTP-Ohio programs for a job clearly has a powerful influence on labor market experience at least in the 6 months immediately after termination.

TABLE 5-4

TITLE III MEANS/PERCENTAGES BY FOUR TYPES OF JTP SERVICES
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

	Classroom Training		Job Search		OJT		Assessment	
Variables	Yes	No	Yes	No	Yes	No	Yes	No
Average Number of Weeks Worked During Follow-Up	7.23	** 9.03	10.00	8.57	10.63	8.63	13.00	* 8.60
Average Employment Rate at Follow-Up	46.33	* 70.23	69.57	65.56	65.35	65.99	100.00	* 65.04
Average Weekly Income at Follow-Up	304.12	382.09	376.68	371.80	286.98	375.94	318.17	374.57
Welfare Status at Follow-up, Percentage of Terminees on Welfare	20.31	* 7.21	4.54	10.03	0	9.91	0	9.71
Education Status at Follow-Up, Percentage of Terminees Receiving Education	4.91	4.38	17.39	3.01	0	4.67	16.17	4.14
Client's Average Ratings Program length	2.44	2.68	2.58	2.55	2.76	2.53	3.00	2.53
Staff	3.60	* 3.26	3.19	* 3.53	3.50	3.42	3.17	3.45
Program overall	3.27	* 2.67	2.71	3.08	2.73	3.01	2.25	3.02
Help on job	2.67	2.14	2.05	2.52	2.07	2.43	2.60	2.35
Percentage JTPA Assisted to Find Job	12.68	30.89	22.22	23.13	42.68	19.02	40.00	21.23
Percentage of Employers Required JTPA Sign up	26.02	9.88	5.88	22.11	23.89	15.86	0	18.80
Response Rate	90.47	95.00	92.00	92.98	100.00	91.78	100.00	92.10
Sample Size	42	40	25	57	9	73	6	76

TABLE 5-5

TITLE III MEANS/PERCENTAGES BY REASON FOR TERMINATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

Variables	Entered Employment A01-A05	Exceeded Program C-12	Exceeded 90-Day Hold C-14	Poor Attendance C06, C07	Other
Average Number of Weeks Worked During Follow-Up	11.04	6.08	8.50	3.00	**** 5.94
Employment Rate at Follow-Up	84.52	53.85	50.00	0	**** 45.78
Average Weekly Income at Follow-Up	385.72	176.86	84.00	0	*** 281.68
Welfare Status at Follow-Up Percentage of Terminees on Welfare	2.46	7.69	0	0	**** 19.28
Education Status at Follow-Up Percentage of Terminees Receiving Education	3.60	0	0	0	1.22
Client's Average Ratings Program length	2.47	2.67	3.00	3.00	* 2.13
Staff	3.43	3.10	4.00	3.00	3.26
Program overall	3.20	2.75	2.50	3.00	3.12
Help on job	2.49	2.44	100.00	1.00	2.19
Percentage JTPA Assisted to Find Job	25.54	22.22	50.00	0	8.16
Percentage of Employers Required JTPA Sign up	8.93	0	0	0	10.63
Response Rate	82.62	86.67	100.00	100.00	76.85
Sample Size	305	15	2	4	108

Tables 5-6 to 5-9 report the associations between the outcome measures and the following characteristics of the title III clients: employment at the time of application to JTP-Ohio, education, welfare, and family status.[3] There are no statistically significant relationships between employment status and the outcomes, and the differences, except for welfare status, are small (table 5-6). These results are consistent with the PY 1986 survey and the title IIA results. Employment status at application is not a reliable predictor of the effects of JTP-Ohio services. In contrast, table 5-7 shows that education has a strong association with earnings and employment in the expected direction. That is, more eduction is associated with higher average earnings and higher levels of employment.

Welfare status at application (table 5-8) has a statistically significant association with weeks worked, employment in week 13, and welfare status at follow-up. Those not receiving AFDC or general assistance at application work more weeks than those who are receiving such aid and are also substantially more likely to be employed in week 13. As one would expect, those not receiving public assistance at application are less likely to receive some type of public assistance at follow-up. The high average earnings for AFDC recipients is misleading, and nonsignificant, because it is based on only three former recipients who were employed at follow-up.

Information on family status at application was available for only about one-fifth of the respondents (table 5-9). Because of the small number of respondents in the categories, only one of the outcomes yielded a statistically significant difference at the .05 level.

In chapters 3 and 4 the importance of conducting multivariate analysis to yield more precise estimates of the effects of JTP-Ohio training and services was emphasized. Such analyses were attempted with the title III data. Because of the low proportion of respondents for whom complete data were available, however, these analyses yielded very few significant findings that alter the results presented in the bivariate tables. In particular, the strong influence that receiving assessment had on earnings in the PY 1986 data was not found in the current data either in the bivariate or the multivariate analysis. Until more complete data are available, it would be wise to reserve judgment on the effectiveness of assessment as a service to title III clients. It would also be prudent to consider the multivariate analyses of the title IIA data as reflecting the most likely relationships among the variables for the title III clients. The relationships in the title III data, however, may not be as strong as in the title IIA data. The title III clients have had more successful prior work histories than the title IIA clients, and the influence of these histories on their post-program employment may be more powerful than particular individual characteristics.

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[3] There were so few cases of title III individuals with employment barriers (0 offenders, 0 handicapped, and 2 LEP) that the tabulation is not reported here, even though it is included in the title IIA chapter.)

TABLE 5-6

TITLE III MEANS/PERCENTAGES FOR EMPLOYMENT STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

Variables	Employed	Not Employed
Average Number of Weeks Worked During Follow-up	9.30	8.87
Employment Rate at Follow-up	61.33	60.14
Average Weekly Earnings at Follow-Up	323.44	335.70
Welfare Status at Follow-up, Percentage of Terminees Receiving Education	0.00	14.69
Education Status at Follow-up, Percentage Terminees Receiving Education	10.67	8.14
Client's Average Ratings		
Program length	2.49	2.59
Staff	3.52	3.39
Program overall	3.12	2.94
Help on job	2.18	2.37
Percentage JTPA Assisted to Find Job	19.84	22.88
Percentage of Employers Required JTPA Sign up	20.52	15.08
Response Rate	90.00	93.75
Sample Size	20	64

TABLE 5-7

TITLE III MEANS/PERCENTAGES OF OUTCOMES BY EDUCATION STATUS
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

Variables	Drop Out	H.S. Graduate	Some College	College Grad.
Average Number of Weeks Worked During Follow-Up	7.91	9.63	9.11	** 11.43
Employment Rate at Follow-Up	63.56	73.09	67.87	* 90.98
Average Weekly Income at Follow-Up	325.36	323.14	427.11	*** 455.45
Welfare Status at Follow-Up, Percentage of Terminees on Welfare	11.84	6.76	6.72	2.89
Education Status at Follow-Up, Percentage of Terminees Receiving Education	15.89	.51	1.34	**** 0
Client's Average Ratings Program length	2.05	2.41	2.43	* 2.68
Staff	3.16	3.40	3.38	3.50
Program overall	3.06	3.17	3.18	3.13
Help on job	2.29	2.33	2.57	2.65
Percentage JTPA Assisted to Find Job	21.93	24.18	16.61	24.16
Percentage of Employers Required JTPA Sign up	23.83	6.89	9.78	** 0
Response Size	51	191	81	34

NOTE: Educational status was defined by survey response. It is not possible to calculate response rate because education status could not be obtained for those in the original sample who were not interviewed.

TABLE 5-8

TITLE III MEANS/PERCENTAGES FOR VARIABLES BY WELFARE STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

Variables	AFDC Recipient	General	Not Welfare
Average Number of Weeks Worked During Follow-up	6.66	.69	**** 10.33
Employment Rate at Follow-up	28.75	0	**** 77.91
Average Weekly Income at Follow-up	545.70	0	338.86
Welfare Status at Follow-up Percentage of Terminees on Welfare	41.37	69.21	**** 3.09
Education Status at Follow-up Percentage of Terminees Receiving Education	0	0	3.44
Client's Average Ratings Program length	2.33	2.53	2.46
Staff	3.77	3.06	3.36
Program overall	3.49	3.52	3.08
Help on job	3.87	0	**** 2.29
Percentage JTPA Assisted to Find Job	28.34	0	22.45
Percentage of Employers Required JTPA Sign up	29.99	0	9.11
Response Rate	100.00	60.00	89.73
Sample Size	10	5	224

TABLE 5-9

TITLE III MEANS/PERCENTAGES OF VARIABLES BY FAMILY STATUS AT APPLICATION
QUARTER 4, PROGRAM YEAR 1986
QUARTERS 1-3, PROGRAM YEAR 1987

Variables	Single Parent With ≥1 Child Under 6 yrs	Single Parent With ≥ 1 Child 7-17 yrs	Parent in 2 Parent Home	Other Family Member	Non Dependent
Average Number of Weeks Worked During Follow-Up	13.00	0	9.01	7.80	10.33
Employment Rate at Follow-Up	100.00	0	58.10	61.12	69.84
Average Weekly Income at Follow-Up	554.00	0	361.60	249.97	294.29
Welfare Status at Follow-Up Percentage of Terminees on Welfare	0	100.00	9.37	16.65	* 6.90
Education Status at Follow-Up Percentage of Terminees Receiving Education	100.00	0	6.00	14.82	6.90
Client's Average Ratings Program length	3.00	3.00	2.49	2.44	2.84
Staff	3.00	3.00	3.68	3.01	3.00
Program overall	0	3.00	3.13	2.85	2.60
Help on job	0	0	2.41	2.36	2.00
Percentage JTPA Assisted to Find Job	0	0	21.50	29.28	17.59
Percentage of Employers Required JTPA Sign up	0	0	20.57	0	18.67
Response Rate	100.00	50.00	94.23	92.86	93.33
Sample Size	1	2	52	13	15

CHAPTER 6

EMPLOYER SURVEY

This chapter presents the analysis of the PY 1987 survey of employers of title IIA JTP Ohio clients. Data for this chapter are taken from two sources. The primary source of information is a sample of employers of former JTP Ohio title IIA clients. The second data source is the 13-week follow-up survey of individuals who received services under JTP Ohio programs. The chapter presents employer attitudes and opinions regarding the performance of the former clients and the employers' reasons for participation in JTP Ohio programs. The chapter also assesses the agreement between some of the information provided by participants in the title IIA survey and similar information from their employers. These reliability checks were carried out by merging data from the employer survey with data from the title IIA 13-week survey by matching social security numbers on the two data files.

The report is organized into two sections. The first section describes the procedures of the employer survey, and the second section reports the findings. A discussion of the implications is contained in chapter 7.

Procedures

The employer survey was conducted with the employers who first hired title IIA clients after they left JTP Ohio services. These employers were compiled into a list that defined the sample frame for the employer survey. Only employers of title IIA clients who ended their JTP Ohio participation during the first 36 weeks of PY 1987 (1 July 1987 through 5 March 1988) were included. Employer names were included in the list as often as they were listed by former JTP title IIA respondents. The probability of selection into the employer sample thus was determined by the frequency of hiring former title IIA participants. The sampling unit was establishment (not firm). An initial sample of 511 different establishments was selected. Table 6-1 presents the results from the contracts with these establishments.

The employer survey is divided into two parts. Part one contains questions concerning employer attitudes and opinions. In larger establishments the questionnaire was completed by an administrative officer of the establishment. Part two requests starting date, ending date, wage, hours, and reason for leaving (if not still employed) for each former JTP client at the establishment who was drawn in the employer sample. In larger firms, this information typically was supplied by a personnel administrator in a central office. In small firms, respondents varied; frequently the owner and CEO completed both parts of the employer survey. As shown in table 6-1, response rates for part two (78.5 percent) are

TABLE 6-1

RESPONSE RATES FOR EMPLOYER SAMPLE

Part 1: Employer Attitudes and Opinions

	N	Percentage
Sample frame	511	100.0
Questionnaires returned	340	66.5
Aware of JTP participants	199	38.9
Maximum usable sample	199	38.9

Part 2: Employer Verification

	N	Percentage
Sample frame	549	100.0
Questionnaires returned	431	78.5
Employees verified	423	---
Maximum usable employee sample	412	97.4

much better than response rates for part one (66.5 percent). Both of these rates are over 10 percentage points higher than those obtained for the PY 1986 survey.

The data collection was conducted by Appropriate Solutions, Inc., under subcontract to the National Center. Initial contacts with establishments were made by telephone to determine the correct address and appropriate respondent in the firm. Questionnaires for part one and part two of the survey were then mailed to the person identified by telephone. The cover letter identified OBES, OSU, and ASI as jointly responsible for the data collection, explained the importance of the survey, and gave directions for completing both parts. If the recipient of the letter was not the appropriate respondent, the letter provided instructions to distribute the two parts to those in the firm who could complete them. It was expected that records of the firm would be used to complete part two. One to five telephone reminders were used to encourage respondents to return completed questionnaires; these reminders were quite effective. About half of the sample received telephone reminders.

Variables

Twenty-four items from part one of the employer survey were used in the analyses. The complete employer questionnaire appears in the appendix to this report. The variables were defined by assigning numeric values to the response options. The numeric values used are given beside the response option in the appendix and in tabulations presented later in this chapter.

Twelve variables were used to assess the agreement between employee and employer reports. Six were taken from employee (title IIA) reports, and the other six contained the same information as the employee variables but were reported by the employer. The content of the six variables and the question on which each is based for employees and employers is as follows:

	Employee	Employer
Starting date	Q11b	Q1
Ending date	Q11c	Q1
Hours/week	Q11d	Q3
Earnings/week	Q6	Q5
Still employed	Q11f	Q2
Reason left	Q11f	Q2

Dates were converted to decimal numbers using years as units. Dates with missing days were converted to decimal numbers by substituting 15 for the missing day. Dates with missing months or years were defined as missing values. The earnings from the employee data were defined as missing if the respondent had worked at more than one firm during the 13-week follow-up period. This procedure was necessary to ensure that the earnings report of the title IIA respondent was for the same firm as the respondent to the employer survey (since the employer was the first employer after the JTP client ended participation in title IIA programs).

Data on employees' reasons for leaving firms are sparse because most title IIA respondents remained with their firms during the follow-up. Pairs of dichotomous variables (one for employee, one for employer) were constructed indicating whether the title IIA respondent still worked at the firm at the time of the survey. One variable was defined from the ending date. (The ending date was given a special code to indicate the individual still worked at the firm.) The other variable was defined from the reason left. (Reason left also was given a special code if the individual had not left.) A double reliability check on whether the title IIA respondent was still working at the firm was conducted using these two pairs of variables.

Analysis

Most of the analysis is presented in the form of frequency/percentage distributions and cross-tabulations. These forms of presentation are quite common and require no exposition here. Two aspects of the analysis may not be self-explanatory, however, both are related to the assessment of employee-employer correspondence regarding dates, hours, earnings, and so forth. The first aspect is the test of significance of differences between mean values for the same content variable calculated from the employee and employer samples. The second has to do with summarizing the degree of case-by-case correspondence between individual employee and employer reports.

One way to gauge employee-employer agreement is to compare the averages of employee reports to the corresponding averages of employer reports. It would be useful to conduct a statistical test of the null hypothesis that the two means are equal. However, since the two samples are not independent of each other, the usual formula for the standard error of the difference between two means is not appropriate. In fact, in the present case where employee and employer reports are positively correlated, the usual formula would substantially overstate the standard error thus tending to exaggerate the degree of agreement between employees and employers. The formula for the standard error of the difference between two means calculated from independent random samples is--

$$SE = ({}_{1}^{2} + {}_{2}^{2})/N \quad |\text{independence}$$

where SE stands for standard error; ${}_{1}^{2}$ and ${}_{2}^{2}$ denote the variance of x in sample 1 and sample 2, respectively; and N = the sample size--assumed the same in both samples for the present application. For nonindependent samples, the formula is--

$$SE = ({}_{1}^{2} - 2 \quad {}_{12} + {}_{2}^{2})/N \quad |\text{nonindependent samples}$$

where ${}_{12}$ is the covariance between employee and employer reports. To illustrate how seriously the first formula can overestimate the standard error in the case of earnings, the first formula (using sample standard deviations and N-1 in the denominator) yields an estimate of 10.5; whereas, the second formula yields 5.4.

The means of the employee and employer reports could be the same or nearly the same even if there were poor correspondence between the two reports in case-by case comparisons. Therefore, it is informative to summarize the degree of case-by-case correspondence. For numeric variables, the most commonly used measure of the degree of correspondence is the correlation coefficient. The square of the correlation between employee and employer reports indicate the proportion of total variance in employee reports "explained" or "accounted for" by the employer report.[1] It summarizes the degree to which employee reports can be predicted from a linear function of employer reports, according to the following formula:

$$\text{employee report} = a + b^{*} (\text{employer report}) + e$$

where a and b are constants, and e is the error of prediction.

A number of indexes of agreement could be used. For example, the average error disregarding direction is easy to interpret. We chose the squared correlation because (1) it ranges between 0 and 1 (1 = perfect correspondence), (2) its unrestricted value can be interpreted as the proportion of "explained" variance, and (3) it is the most commonly used measure of association, thus permitting ready comparison to findings in other studies.

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[1] Employee reports are treated as dependent variables, and employer reports as independent variables.

Findings

This section presents the major findings on employer opinions and attitudes--part one of the employer survey--and the degree of agreement between employee and employer reports of employment variables--part two of the employer survey and the related variables from the title IIA 13-week survey.

Employer Attitudes and Opinions

Employer responses to part one of the employer questionnaire are organized into six broad content areas:

- employer opinions of job application skills of JTP participants
- employer assessments of JTP participants' job performance
- employer perceptions of the JTP program as a source of employees
- employer perceptions of the cost-benefit ratio of participating in JTP
- employer opinions of job-related behaviors (turnover, absenteeism/tardiness, theft/vandalism) of JTP participants
- employer reasons for hiring JTP participants.

The cost-benefit assessments of employers are measured by a single question (Q8), and four items indicate reasons for participation (Q10). In addition, tables are presented indicating the number of employees who were JTP participants for each firm and the average length of employment of JTP participants.

Table 6-2 summarizes employer opinions of JTP participants' job application skills.[2] As in all tables assessing attitudes or opinions, statistical tests are reported indicating whether the opinion deviates from the neutral level--midpoint of the range. In the case of job application skills, employees report that JTP participants are above average. The deviations from neutral are small but they are statistically significant, especially for resume skills.

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[2] All significance test in this chapter test the hypothesis that the mean equals the midpoint of the range (neutral). Significant values above the midpoint indicate positive employer assessments of JTP participants, and significant values below the midpoint indicate negative assessments. The following are used to indicate the level of significance in all tables:
*$p \leq 0.05$; **$p \leq 0.01$; ***$p \leq 0.001$; ****$p \leq 0.0001$.

TABLE 6-2

EMPLOYER OPINIONS OF JOB APPLICATION SKILLS OF JTP CLIENTS

Skills	JTP Employees Are--				Mean	Standard Deviation	N
	Better(3)	Same(2)	Worse (1)	No Opinion (2)			
Resume skills (Q2A)	22.8%	54.8%	5.6%	16.8%	2.17****	0.51	197
Interviewing skills (Q2B)	16.2	67.2	9.6	7.1	2.07*	0.50	198

NOTE: Numeric values assigned to each response option are given in parenthesis following the option.

Employer assessments of job performance of JTP participants are reported in table 6-3. The chance that the deviation from neutral is due to sampling error is less than the traditional 0.05 level of significance for five of the items. Employers have a favorable opinion of the appearance, ability to get along with coworkers, work attitudes, work quality, and productivity of JTP participants. In the employers' opinions, however, JTP participants do need more on-the-job training and supervision. On the other characteristics the participants are not significantly different from other typically employees. This in itself could be viewed as a positive finding. The positive assessment of work quality and productivity of JTP participants is particularly encouraging.

As shown in table 6-4, employers find JTP participants to be an excellent source of employees. Almost 9 out of 10 of the employers are likely to hire more JTP participants. The deviations from the neutral point on both items are the largest in any of the tables, and they are highly statistically significant.

The positive assessment of the cost-benefit ratio reported in table 6-5 reinforces the view that employers find JTP participants a good source of employees. The average assessment of the cost-benefit ratio is more than 50 percent of the standard deviation above the neutral point on the item, and the deviation from neutral is highly statistically significant.

TABLE 6-3

EMPLOYER ASSESSMENT OF JOB PERFORMANCE OF JTP CLIENTS

Traits	JTP Employees Are--						Mean	Standard Deviation	N
	Better(3)	Same(2)	Worse(1)	No Opinion(2)					
Appearance (Q2C)	14.6%	72.7%	7.1%	5.6%			2.08*	0.46	198
Communication (Q2D)	12.2	75.1	7.1	5.6			2.05	0.44	197
Math (Q2E)	6.7	59.0	6.7	27.7			2.00	0.37	195
Training (Q2F)	16.3	61.2	10.2	12.2			2.06	0.51	196
Get along (Q2G)	11.1	78.8	2.0	8.1			2.09**	0.35	198
Work attitude (Q2H)	21.8	66.5	7.1	4.6			2.14****	0.51	197
Needs	JTP Employees								
	Need Less(3)	No Difference(2)	Need More(1)	No Opinion(2)			Mean	Standard Deviation	N
OJT needed (Q2L)	9.6	64.6	19.7	6.1			1.90*	0.53	198
Supervision needed (Q2M)	10.6	65.2	20.2	4.0			1.90*	0.55	198
Traits	JTP Employees Are--								
	Much Better (5)	Better (4)	No Diff. (3)	Worse (2)	Much Worse (1)	Don't Know (3)	Mean	Standard Deviation	N
Work quality (Q3)	2.0	18.1	66.8	7.5	0.5	5.0	3.13**	0.58	199
Productivity (Q4)	3.0	21.1	63.8	8.0	0.5	3.5	3.18****	0.63	199

NOTE: Numeric values assigned to each response option are given in parentheses following the option.

TABLE 6-4

EMPLOYER PERCEPTIONS OF THE JTP PROGRAM

Perceptions	Always (5)	Usually (4)	Some-times (3)	Rarely (2)	Never (1)	No Opinion (3)	Mean	Std. Dev.	N
JTP good source of skilled labor (Q5)	6.0	37.7	39.7	8.0	0.5	8.0	3.41****	0.75	199
	Very Likely (5)	Somewhat Likely (4)	Not Very Likely (2)	Not at All Likely (1)	Don't Know (3)		Mean	Std. Dev.	N
Likely to hire more JTP (Q9)	51.8	32.7	4.5	4.0	7.0		4.24****	1.04	199

NOTE: Numeric values assigned to each response option are given in parentheses after the option.

TABLE 6-5

EMPLOYER COST-BENEFIT ASSESSMENT (Q8)

	Percentage	N
Costs outweigh benefits (1)	8.1	16
Benefits outweigh costs (3)	43.4	86
Costs and benefits are about the same (2)	26.3	52
No opinion (2)	22.2	44
Total	100.0	198

Mean	2.35
Standard deviation	0.63
Significance	0.0001

NOTE: Numeric values assigned to each response option are given in parentheses after the option.

Table 6-6 shows a statistically significant tendency for employers to believe that JTP participants are less prone to theft and vandalism on the job than are other employees. Discrepancies from neutral are small, however. The data show that employees believe that JTP participants are about as prone to job turnover, absenteeism, and tardiness, as other employees.

Reasons why employers participate in JTP are shown in table 6-7. These data indicate that the wage subsidy is the most important reason for participation. (Employers reported that they had received subsidies for 40 percent of the former clients for whom employment was verified.) However, lower recruitment and training costs are also significant. Contribution to the corporate image is less important than the other reasons.

Tables 6-8 and 6-9 show the number of JTP employees per firm and the average length of employment, respectively. The mean number of employees is one of the few results that differed from those found last year to any important degree (2.43 employees). This increase was caused primarily by one employer that reported it had hired 247 JTP participants, more than twice as many as the next largest employer. It is encouraging to find that, similar to the PY 1986 survey, most JTP employees remain with the firm for about a year (DKs excluded).

On balance, employers usually express a favorable assessment of JTP. Particularly encouraging is the fact that they believe that JTP participants are most productive and do higher-quality work than nonparticipants and are good sources of trained employees. Almost 9 our of 10 of the employers report that they will likely hire JTP participants again. Also, employers believe that the benefits outweigh the costs of participation.

Perhaps most significant from a policy perspective is the consistency of these results with those found in the previous survey. Virtually all of the results differ from the PY 1986 survey by only a few percentage points or a tenth or less on a mean score. This consistency indicates that the surveys are reliably measuring fairly stable attitudes toward JTP among employers.

TABLE 6-6

EMPLOYER ASSESSMENT OF JTP CLIENTS' EMPLOYMENT-RELATED BEHAVIORS

Behavior	JTP Clients Are--				Mean	Standard Deviation	N
	Better(3)	Same (2)	Worse(1)	No Opinion (2)			
Turnover (Q2I)	17.3%	53.6%	18.9%	10.2%	1.98	0.60	196
Absenteeism/ Tardiness (Q2J)	21.3	58.4	15.2	5.1	2.06	0.60	197
Theft/vandalism (Q2K)	6.2	53.4	1.6	38.9	2.05*	0.28	193

NOTE: Numeric values assigned to each response option are given in parentheses after the option.

TABLE 6-7

REASONS WHY EMPLOYERS PARTICIPATE IN JTP OHIO PROGRAMS

Reason	Extremely Important (5)	(4)	(3)	(2)	Not at all Important (1)	Mean	Standard Deviation	N
Lower recruitment costs (Q10A)	27.2%	19.4%	25.6%	10.0%	17.8%	3.28**	1.42	180
Lower training costs (Q10B)	24.9	23.8	27.0	8.6	15.7	3.34***	1.35	185
Subsidy (Q10C)	38.9	22.7	14.1	10.8	13.5	3.63****	1.43	185
Help corporate image (Q10D)	11.0	12.7	35.4	13.3	27.6	2.66***	1.30	181

NOTE: Numeric values assigned to each response option are given in parenthesis after the option.

TABLE 6-8

NUMBER OF JTP EMPLOYEES (Q6)

Number of Employees (Q6)	Percentage	N
None	4.5	9
1	22.6	45
2	12.6	25
3	6.5	13
4	4.5	9
5	5.0	10
6	2.5	5
7	1.5	3
8	1.5	3
9	0.5	1
10	2.5	5
More than 10	16.1	32
Don't know	19.6	39

Mean = 10.29 (N = 160)
Standard deviation = 26.49

NOTE: Don't knows were omitted from calculation of mean and standard deviation.

TABLE 6-9

AVERAGE TENURE OF JTP CLIENT EMPLOYMENT (Q7)

Tenure (Q7)	Percentage	N
1 to 3 months (2)	11.2	22
4 to 6 months (5)	13.3	26
7 to 9 months (8)	9.2	18
10 to 12 months (11)	10.2	20
More than 12 months (18)	34.7	68
Don't know (missing)	21.4	42
Total	100.0	196

Mean = 11.44 (N = 154)
Standard deviation = 6.35

NOTE: Numeric values assigned to each response option are given in parentheses after the option. Calculation of the mean and standard deviation omitted the don't knows.

Correspondence between Employee and Employer Reports

The methods of assessing the correspondence between employee and employer reports of numeric variables are described in the procedures section of this chapter. Table 6-10 presents the statistics described there. To summarize briefly, the employee report is considered the dependent variable and the employer report is the independent variable. The correlation coefficient is a measure of the degree of agreement, 1.00 being the maximum, and the r-square is the squared correlation from the regression. The overall results in table 6-10 show close agreement between the average employee and employer reports of start date, ending date, hours per week, and less agreement on earnings per week. Only the earnings differences are statistically significant, and the numeric values are close. Despite the agreement in the means, case-by-case correspondence between employee and employer reports is generally low to moderate.

TABLE 6-10

CORRESPONDENCE BETWEEN EMPLOYEE AND EMPLOYER REPORTS OF START DATE, END DATE, HOURS, AND EARNINGS

Variable	Employee Mean	Employer Mean	Correlation Coefficient	r-square	N
Starting date	87.2	87.2	.64	0.41	413
Ending date	87.5	87.7	.58	0.34	109
Hours/week	37.2	38.0	.55	0.30	369
Earnings/week	230.0	*** 254.8	.74	0.55	254

NOTE: Tests of hypotheses against the two-tailed alternative that the mean reported by the employee equals the mean reported by the employer were carried out using the correction for correlated samples.

Table 6-11 reports the cross-tabulations between employee and employer reports of whether the employee was still working at the firm at the time of the interview. Since the employer survey occurred later than the employee survey, it is possible for an employee to accurately report still working at the firm and the employer to accurately report that the individual is no longer working at the firm. The lower left cell (totals excluded) of the table therefore may contain consistent entries. The upper right cell clearly contains inaccurate reports. Because of the time lapse between the employee and employer surveys, however, it is difficult to assess the large number of entries in the lower left cell. In comparison to the PY 1986 survey, the degree of agreement between employers and employees is 19 percentage points higher in the cell that indicates the employee is no longer with the firm. Unfortunately, this improvement was combined with a 4 percentage point increase in the upper right hand cell that reflects inaccuracy on the part of one party or the other.

TABLE 6-11

CORRESPONDENCE BETWEEN EMPLOYEE AND EMPLOYER REPORTS OF WHETHER STILL EMPLOYED

Employee Report	Employer Report No	 Yes	Total
No	49.7%	7.4%	26.0%
Yes	50.3	92.6	74.0
Total	100.0 (171)	100.0 (217)	100.0 (388)
	$\phi = 0.48$ $\chi^2 = 89.0$	$\phi^2 = 0.23$ df = 1 $p < 0.0001$	

Table 6-12 reports a cross-classification of employee and employer stated reasons for leaving the job. Entries are numbers rather than percentages. Because of the small N and the large number of cells, no firm conclusions can be drawn from the table; however, some modest degree of agreement between employees and employers is apparent. The largest discrepancy occurs for "fired." Only 8 employees report being fired, 6 of whom were reported as fired by employers. In contrast employers report having fired 32 employees, 16 of whom reported they were still working at the firm. Again, the time-lapse between the two surveys makes interpretation of this result ambiguous.

TABLE 6-12

CORRESPONDENCE BETWEEN EMPLOYEE AND EMPLOYER REPORTS OF REASON FOR LEAVING/STILL THERE

	Employer Reason								
Employee Reason	Fired	Health	Job end	Laid off	New Job	Quit	Other	Still There	Total
Fired	6					1		1	8
Health		2				3		0	5
Job ended			3			4		0	7
Laid off	8		1	9		4		3	25
New job	1		1		13	5		3	23
Quit	1		1		2	13		8	25
Other			1			1	1	1	4
Still there	16	3	2	18	23	23	2	201	288
Total	32	5	9	27	38	54	3	217	385

Overall the data indicate a fairly high degree of disagreement between the individual reports of former JTP participants and their employers, but considerable agreement in the statistics that summarize these individual reports. The combination of findings suggest that there is no consistent pattern of error in the reports from either of the parties. Instead, there are random errors of over and under reporting by both, which tend to cancel each other and yield similar mean values. Furthermore, the time points of reference and exact wording of the questions in the employer and employee questionnaires do not match. The earnings questions are different in the two surveys. If the employee and employer reports are assumed to be equally reliable measures, then the correlation coefficient, rather than the r-square is the estimate of reliability. The correlations reported in table 6-10 are not exceptionally high reliabilities when compared to other social science data, but are within the usual range for short attitude scales.

CHAPTER 7

SUMMARY AND IMPLICATIONS

What do all the analyses and dozens of tables presented in this report allow us to conclude about the effects of the services provided by JTP-Ohio to disadvantaged and dislocated workers? Perhaps the best way to answer this question is to review the characteristics of the clients at application and to trace their experiences through their programs and into the labor market. Such a summary can be presented and followed more easily by separating the discussion of the title IIA and title III clients.

Title IIA Overview

On a statewide basis, the title IIA clients who enroll with JTP-Ohio are evenly divided between males and females. Two-thirds are white, and one-third are either black (31 percent) or a member of another minority group (3 percent). Most clients (53 percent) are between 30 and 54 years of age, and almost all the rest are 29 or younger. Only 3 percent are 55 or older. A little over half (53 percent) are welfare recipients when they apply. Three of every 10 are single parents, and one-quarter are parents in two parent families.

At the time they apply for JTPA services, three-quarters are unemployed; those who are employed earn so little that they qualify as economically disadvantaged. The average number of weeks worked during the year prior to application was 17. One-sixth of the clients have conditions that act as severe barriers to employment: 8 percent are convicted offenders, 7 percent are handicapped, and 1 percent have limited English proficiency. The educational attainment of the clients is higher than might be expected. About one-quarter are high school dropouts, but over one-quarter (27 percent) attended college and 7 percent report they completed it.

As clients are enrolled and assessed, they tend to be assigned to programs and services in accordance with their needs. Welfare recipients and others with the least education and work experience are likely to be assigned to classroom training while those who are more job ready are directed to job search or on-the-job training (OJT). Clients rate their experiences in JTP-Ohio positively with their average ratings falling between "good" and "excellent."

Gender, age, and race have strong influences on employment after leaving JTP-Ohio, as do welfare status, previous work experience, and educational attainment. All of these influences are in the expected direction. White males in the age range 30 to 54 are employed more and earn more than minorities, females and those younger and older. Welfare status, limited work experience and low educational attainment depress employment and earnings.

Just as important as all these individual characteristics, however, is whether or not the clients enter employment at termination. Two-thirds (68 percent) enter employment and these former clients are far more likely to be employed and to have higher weekly earnings when they are contacted 3 months and 6 months after termination than clients who leave JTP-Ohio for other reasons.

Clients' ratings of how much the training or services they receive while in JTP-Ohio programs help them on their jobs fall between "a little" and "some" help. The average rating is significantly above the neutral or midpoint of the scale, but considerably lower than the clients' ratings of their experiences in the programs.

Slightly more than a third (37 percent) of the clients report that JTPA assisted them in finding their first jobs. This represents over half of those who entered employment at termination. Clients who receive job search assistance and OJT are more likely to report assistance in finding a job than those who who take classroom training. Other groups likely to report assistance are high school dropouts, older workers, minorities, and those with limited English proficiency. These also are characteristics that are associated with being less job-ready and more likely to be assigned to classroom training. It appears that program staff provides extra services to less employable clients. As a result, these clients are more likely to report receiving assistance than clients with characteristics more attractive to employers.

About one in five clients (18 percent) report their employers required them to sign up for JTPA to get their jobs. Most of these are clients who were assigned to OJT.

During the first 13 weeks after leaving JTP-Ohio, former clients work an average of 8 weeks. When they are contacted during the thirteenth week, 59 percent are employed. Those who are employed earn an average of $218. When former clients are contacted again another 13 weeks later, 26 weeks after leaving JTP-Ohio, they have virtually the same average number of weeks worked and percentage employed during the second follow-up period, and their average weekly earnings have increased by $7.

It is far more difficult to prepare individuals who are welfare recipients at application for employment. When they are contacted 13 and 26 weeks after termination, those who were on welfare at application work less, earn less, and are more likely to be receiving welfare than those who were not on welfare when they enrolled. Nevertheless, participation in JTP-Ohio substantially reduces the percentage receiving welfare. At application, approximately one-half of all enrollees are recipients. At the

13-week follow-up, this figure drops to almost one-quarter and drops even a little lower at the 26-week follow-up.[1]

The decrease in welfare among those who were recipients at application is larger than the decrease in the overall sample. This decrease, however, is somewhat offset by clients who were not recipients at application but receive welfare at follow-up. Fortunately, those who start receiving welfare are only about one-sixth of those who stop. The reduction among those who were recipients at application is almost 60 percent while less than 10 percent of those who were not recipients at application are on welfare at follow-up.

In general, employers are satisfied with the JTP-Ohio clients whom they hire. Employers were asked to make 15 ratings comparing their typical employees who have been through a JTPA/PIC program with those who have not had such a program. The ratings covered such things as communication skills, ability to get along with fellow employees, absenteeism/tardiness, and productivity. On eight of these scales, the average ratings are in favor of JTP-Ohio clients, and on five there are no significant differences. The exceptions are on the amount of OJT and supervision needed. On these scales the differences are in favor of employees who have not been through a JTPA/PIC program. On the average, clients stay with their first employers after leaving JTP-Ohio for almost a year (11.4 months). Over 80 percent of employers report they are likely to hire more JTPA/PIC participants in the future. Their most important reasons for doing so are the wage subsidy and lower training and recruitment costs, in that order.

Title III Overview

To be eligible for services under title III of JTPA, workers must have been terminated from jobs to which there is little likelihood that they will return or be unemployed for a long period with little prospect for reemployment in the same or similar occupations in the areas where they reside. It is not necessary, however, that they be economically disadvantaged. This difference in eligibility criteria leads to major differences in the characteristics of clients served.

Only 6 percent of title III clients are welfare recipients when they apply to JTP-Ohio, and only 3 percent are single parents. Title III clients are predominantly white (83 percent), male (72 percent), and in the age range 30 to 54 (71 percent). These are characteristics that most research, including the analyses of the title IIA data, has found to be associated with favorable labor market experiences. The follow-up results to be reviewed shortly support this general finding.

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[1] Actual figures are not reported because they differ slightly for the 13-week and 26-week surveys.

Title III clients have relatively high educational attainment and considerable work experience. Only 14 percent did not complete high school; close to half (43 percent) attended college and 10 percent graduated. At the time the title III clients enrolled in JTP-Ohio, they had an average of 18 years of labor market experience, and they had worked 30 weeks during the year prior to enrollment.

A title IIA client with the characteristics of the average title III client would be considered job ready and would probably be assigned to OJT. This is not as frequent an assignment in title III programs. Many title III programs are contracted to service providers such as the labor unions that represent the dislocated workers or to training institutions. These providers tend to offer classroom training or job search rather than OJT. The nature of most title III programs accounts for the low percentage that report JTPA assisted them to find a job (22 percent) and that their employers required them to sign up for JTPA to obtain their jobs (9 percent).

The ratings that title III clients give to the programs in which they participate are very similar to those given by title IIA clients. Clients are most positive about the staff and least positive about the helpfulness of the training or services received in the program on the job. Ratings of their programs average between "good" and "excellent," and their rating of helpfulness on the job averages between "a little" and "some."

Surprisingly, given the characteristics of title III clients, the percentage who are employed at termination from JTP-Ohio (71 percent) is only 3 points higher than that for title IIA clients. The employment rate of the title IIIs, however, does not decline during the follow-up period. In fact, their employment rate at 13 weeks is 73 percent, 2 points higher than at termination. The title IIIs also work on the average almost 10 weeks of the 13-week period, a full week and one-half more than the title IIAs.

The biggest difference in employment experiences between the title III and IIA clients is in average weekly earnings. Title IIIs earn an average of $363 and title IIAs earn $218. An earnings difference of this magnitude cannot be attributed to differences in the types of services received under the separate titles. Much of the difference is a reflection of the characteristics of clients enrolled under the two titles and wage patterns in the labor market that traditionally favor white males in their prime working years. Even among these clients, most of whom have characteristics desirable to employers, whether or not they were employed at termination from JTP-Ohio strongly influences their employment experiences during the follow-up period.

Overall, the percentage of welfare recipients among title III clients does not change from application to follow-up (6 percent). The percentage reduction in welfare status among those who were welfare recipients at application, however, is almost as large among title IIIs as it is among IIAs. That is, about half of the title III clients who were welfare recipients at application are not recipients at follow-up. Those who were recipients at application who are also recipients at follow-up represent 3 percent of all the title III clients. To this 3 percent, however, must be added 3 percent who were not receiving welfare at application who started receiving it during the follow-up period. The result is that the percentage of those on welfare for the total group remains the same even though half of those who received welfare at application do not do so at follow-up.

Implications

The preceding summaries indicate that the services provided by JTP-Ohio are having the intended effect: most disadvantaged clients are obtaining and retaining jobs that pay on the average over $2.00 more per hour than the minimum wage, and over half of those who were welfare recipients when they enrolled have become self-supporting. Dislocated workers are obtaining jobs that pay on the average over $9.00 per hour.

Many personal characteristics over which JTP-Ohio has no control have a strong influence on what happens to clients after they leave their programs. One factor over which JTP-Ohio has some control, however, has a powerful impact independent of personal characteristics. That factor is whether or not the client is employed at termination. Clients who are employed at termination (in comparison to those who are not) are more likely to be employed and are less likely to be on welfare when they are contacted 13 and 26 weeks later. These are substantial differences of two to three magnitudes in favor of those who are employed at termination, even when the effects of differences in personal characteristics are statistically controlled. For example, the employment rate at 13 weeks among IIA clients who were employed at termination is 75 percent compared to rates ranging from 25 to 31 percent among those who left JTP-Ohio for other reasons. Differences in weeks worked during the follow-up period and in welfare status are of similar magnitudes. The advantage in average weekly earnings for those employed at termination is not as sizeable, but weekly earnings are only calculated for those who are employed at follow-up.

Simply having a job at termination, however, is not as powerful as these comparisons suggest. What having a job indicates is the presence of a number of other personal traits that are important to success in the labor market. Those clients who had jobs at termination also had--with the support and encouragement of staff--sufficient motivation, personal discipline, and resources to persist in their JTP-Ohio programs. They wanted jobs enough to find the JTP-Ohio agencies in their SDAs, to enroll with these agencies, to accept the program assignments they were given, to fulfill the responsibilities of their programs, and to accept the jobs that the programs made available. They had, in other words, successfully passed a number of screens or hurdles that indicate they have the skills and personal characteristics that are desired by employers.

Unfortunately, the services that JTP-Ohio can provide are not enough to enable everyone who enrolls to develop or demonstrate preferred skills and characteristics. About 3 of every 10 who enroll do not have jobs when they leave even though the clients who are least job ready do receive the most services. Welfare recipients, exoffenders, and those with handicaps, low educational attainment and limited work experience are the ones most likely to be assigned to classroom training which is the most intensive service available from JTP-Ohio.

In some cases, though, the opportunities that can be provided are not enough. When the employment and earnings of former clients who took classroom training are compared to those who received OJT, it appears that OJT produces much better results. When the differences in the characteristics of clients assigned to these programs are controlled statistically, much of the apparent superiority of OJT disappears. It is not that OJT is a far more effective program; rather, it is that classroom training is assigned those more difficult to serve. When the differences in clients served by the two programs are considered, the results of these programs are much more similar than when the differences in clients are not considered.

To a considerable degree, the results presented in this report confirm the basic assumption that has been the core of employment and training programs since their inception. Program staff know that there are many people who need a little more assistance and encouragement than they have received in their previous encounters with the educational and employment institutions of our society. This is what JTPA provides. JTP-Ohio cannot overcome all the problems that all its clients bring to it, but it can and does help many and the effects of this assistance persist at least for a half year after the clients leave their programs.